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No.

In the

Supreme Court of the United States

OCTOBER TERM, 1980

STEWART-WARNER CORPORATION,

Petitioner,

vs.

WESTERN ELECTRIC COMPANY, INCORPORATED,

Respondent.

PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

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QUESTIONS PRESENTED

The questions presented by this petition are:

1. Is it patent misuse for the owner of an industry-dominating patent to give royalty rebates to companies which take package licenses under its entire portfolio of 400 semiconductor patents (such rebates taking the form of royalty reductions given in exchange for cross-licenses under the licensees' semiconductor patents) but to refuse to give such a rebate to a company which requests a license under the industry-dominating patent alone, particularly where the owner of the industry-dominating patent:

(a) has more patents and more licensees than any other company in the semiconductor industry, and

(b) is subject to an antitrust consent decree requiring it to grant licenses under "any, some or all" of its patents for royalties that are "non-discriminatory as between licensees"?

2. Where the patent held valid and infringed covers a process that is used only in the manufacture of semiconductor wafers or chips and not in their subsequent housing or encapsulation, may an award of damages be based on the entire market value of the finished semiconductor devices or products containing the chips made by the patented process, even though:

(a) five other major semiconductor inventions are incorporated in the finished semiconductor devices,

(b) the dollar value of the chips manufactured by the patented process is only 1/6 of the dollar value of the finished semiconductor devices in which those chips are contained, and

(c) the remaining 5/6 of the dollar value of the finished semiconductor devices was added through housing and encapsulation operations performed outside the United States?

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Petitioner respectfully prays that a writ of certiorari issue to review the judgment of the United States Court of Appeals for the Fourth Circuit in its appeals No. 79-1129 and No. 79-1130, entered on October 2, 1980.

OPINIONS BELOW

The opinion of the Court of Appeals has not yet been reported; it is, however, set forth in the appendix to this petition, commencing at page 1a. The District Court's order adopting the report of the Special Master as its opinion and decision and the report of the Special Master (including his findings of fact and conclusions of law)—none of which has been reported—are also reproduced

in the appendix, commencing at pages 16a and 17a, respectively.

JURISDICTION

The judgment of which review is sought by this petition was entered on October 2, 1980. This Court has jurisdiction under the provisions of 28 USC § 1254(1).

THE STATUTE INVOLVED

The statute involved is Section 284 of the Patent Act of 1952 (35 USC § 284), the relevant portion of which reads:

> "Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court".

The law of patent misuse (established by numerous decisions of this Court and the lower federal courts) constitutes a judicial exception to the application of the quoted statutory provision, and the entire market value rule (also established by decisions of this Court and the lower federal courts) provides a vehicle for awarding, in appropriate cases, damages in a substantially greater amount than a patent owner would normally be entitled to recover under the literal language of the statute.

STATEMENT OF THE CASE

Western Electric's complaint charging Stewart-Warner with infringement of the Derick-Frosch patent (U.S. patent No. 2,802,760, entitled "Oxidation of Semiconductive Surfaces for Controlled Diffusion") was filed in the United States District Court for the Eastern District of

Virginia on September 19, 1975—more than 11 years after Western Electric opened negotiations with Stewart-Warner regarding a possible license to Stewart-Warner under the patents in Western Electric's semiconductor patent portfolio, including Derick-Frosch.

Pre-Suit License Negotiations

Western Electric, which acts as the patent licensing agent for American Telephone & Telegraph Company, Bell Laboratories and the entire Bell System, first contacted Stewart-Warner about a license under Western Electric's semiconductor patent portfolio in January of 1964, upon learning that Stewart-Warner had formed a subsidiary (Stewart-Warner Microcircuits) for the purpose of entering the semiconductor integrated circuits market (DX 101).

At that time, and throughout the licensing negotiations which followed, Western Electric had more patents in its semiconductor patent portfolio than any other company, and also had the greatest number of licensees in the semiconductor industry (PX 100, pp. 58, 73-74 and 76-77).

Throughout that same period, Western Electric and AT&T were subject to the provisions of a consent decree entered in 1956 in an antitrust action brought against them by the United States. That decree required them to grant patent licenses under "any, some or all" Bell System patents for royalties that are "non-discriminatory as between licensees" (DX 158, pp. 7 and 9).

At the very outset of the license negotiations, Western Electric's licensing manager Montgomery told

Stewart-Warner's director of patents Douvas that Western Electric had approximately 400 patents in the semiconductor field, of which "about 45 were considered to be of substantial commercial importance", and that Stewart-Warner could take a license under *one or all* of those patents, *with a royalty reduction for a grant-back license* to Western Electric under Stewart-Warner's semiconductor patents and pending applications (PX 81 A; R. XXVII at 844-849; R. XXVIII at 962-964).

After evaluating Stewart-Warner's patent portfolio, Western Electric offered Stewart-Warner a grant-back reduction of ½% from Western Electric's package royalty rate of 2½%—not because Western Electric had a favorable impression of Stewart-Warner's research and development facilities or invention-generating potential, but because a ½% reduction was considered by Western Electric's licensing department to be a "nominal" grant-back reduction that would be given to any company which began manufacturing and selling semiconductor devices or apparatus (DX 102, 105, 107; R. XXVII at 879-880; Ct. Ex. 15, pp. 55-56).

Subsequent negotiations reduced the number of patents seriously considered for licensing to Stewart-Warner from (a) all of the patents in Western Electric's semiconductor portfolio to (b) the Derick-Frosch, Andrus, Pfann and Kliemack patents which Western Electric represented to be "of special importance in the semiconductor field" (PX 81 D). Western Electric nonetheless continued to offer Stewart-Warner a ½% grant-back reduction if

Stewart-Warner would take a license under those four patents (DX 111, 123-127, 130).*

Western Electric changed its position, however, when Stewart-Warner's director of patents concluded that the Andrus, Pfann and Kliemack patents were either invalid or not infringed by Stewart-Warner and requested a license under the Derick-Frosch patent only; responding to that request, Western Electric advised Stewart-Warner that no grant-back reduction would be given to Stewart-Warner if it took a license under Derick-Frosch alone (DX 131, 133, 136-139).

Western Electric also refused Stewart-Warner's request for a written statement of "your reasons for not offering Stewart-Warner a grant back reduction in the event it took a license under a single patent". That request was made in a letter in which Stewart-Warner's director of patents also reminded Western Electric that "Montgomery's letter of June 6, 1966 clearly states that the grant back reduction would be available regardless of the number of patents licensed" (DX 133).

After waiting several weeks and receiving no written response to that letter, Stewart-Warner's director of patents wrote a further letter to Western Electric in which he set forth his own understanding of the reasons orally expressed to him by Western Electric's license negotiators for refusing to give Stewart-Warner a grant-back reduction if it took a license under Derick-Frosch only, stating:

> "You indicated that you are unwilling to express the position of the Western Electric Company in

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* With a ½% grant-back reduction, Western Electric would have realized a net royalty of 1.97% under such a four patent package license, as opposed to a net royalty of 2% for a license under its entire portfolio of 400 semiconductor patents (DX 116 and 116 P).

> writing on the grant-back request because your legal department advised that at some future date a charge of coercion would be made that Western obtained a license under several patents and applications in return for a license under only a single Western patent plus a royalty" (DX 137).

Stewart-Warner's director of patents then went on to say:

> "This letter should alleviate any such apprehension because the inclusion of a grant-back clause in the license agreement is made entirely at the request of the Stewart-Warner Corporation" (DX 137).

Despite that letter, Western Electric not only persisted in its refusal to give Stewart-Warner *any* grant-back reduction in a license under the Derick-Frosch patent alone, but continued to insist that Stewart-Warner required a license under the Andrus, Pfann and Kliemack patents, as well (PX 81 O; DX 140 P and 142-145).*

Western Electric's real reason for refusing to give Stewart-Warner a grant-back reduction in a license under the Derick-Frosch patent alone was established beyond doubt after this litigation was commenced, however, when Q. W. Weist (the general manager of Western Electric's patent licensing department during its license negotiations with Stewart-Warner), testified:

> ". . . one of the reasons I wanted to go out and talk to Mr. Potter [a Stewart-Warner vice president] was

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* That Western Electric was not acting in good faith in taking the position that Stewart-Warner needed a license under the Andrus, Pfann and Kliemack patents, as well as Derick-Frosch, is certain, for when this action was finally filed, Stewart-Warner was charged with infringement of the Derick-Frosch patent alone—thus indicating that Western Electric's lawyers agreed with Stewart-Warner's director of patents that the Andrus, Pfann and Kliemack patents were either invalid or not infringed by Stewart-Warner.

to make sure that someone in his decision-making position recognized the problems associated with taking a license under a single patent, particularly where we had other people who were making similar devices to Stewart-Warner paying for more than that single patent" (Ct. Ex. 12, pp. 13-14).

What truly concerned Western Electric, it thus appears, was the possibility that its hundreds of package licensees might stop paying royalties on the Andrus, Pfann and Kliemack patents if Stewart-Warner (having discerned that those three patents were either invalid or not infringed) obtained a license under and paid royalties on the Derick-Frosch patent only—and it was that concern which caused Western Electric to withdraw the ½% grant-back reduction it had previously offered if Stewart-Warner would take a package license, when Stewart-Warner requested a single patent license under Derick-Frosch.

Western Electric, in short, offered Stewart-Warner the following choices:

1. A package license under Western Electric's entire portfolio of 400 semiconductor patents for a total royalty of 2½%, with 2% payable in dollars and the remaining ½% payable in the form of a grant-back license to Western Electric under Stewart-Warner's semiconductor patents, pending applications and future inventions; or

2. A package license under the Derick-Frosch, Andrus, Pfann and Kliemack patents for a total royalty of 2.47%, with 1.97% payable in dollars and ½% in the form of a grant-back license; or

3. A license under the Derick-Frosch patent only for a total royalty of 1½% payable entirely in dollars (rather than 1% in dollars and a ½% grant-back reduction).

Using the criteria of Western Electric's own economic expert, Dr. Tilton, its offer of those choices to Stewart-Warner was an act of discrimination against applicants for single patent licenses and in favor of package licensees, for Dr. Tilton testified that only if "you give both licensees the same options . . . under the economic definition of discrimination, there would be no discrimination . . ." (R. XXVII at 737-738).

Nor can there be any doubt that, in the case of a license from Western Electric, the option of paying a portion of the standard royalty through a cross license (for which the licensee received a grant-back royalty reduction) was generally recognized as affording the licensee a significant economic advantage over the option of paying the standard royalty entirely in dollars. That conclusion is required by:

1. The testimony of Western Electric's principal license negotiator (Montgomery) that "usually in the negotiations with a potential licensee . . . their desire was always to get the lowest possible royalty rate and they usually desired a bilateral agreement because it was an agreement vehicle to provide lower royalty rates" (R. XXXVII at 851).*

2. The opening statement of Western Electric's trial counsel, who emphasized that same desire on the part of the licensees when he said:

> "The licensees want bilateral agreements, because by doing their business on that basis, they get

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*In Western Electric patent licensing parlance, a *unilateral* license is one in which the licensor grants a license for a royalty payable entirely in dollars, whereas a *bilateral* license is one in which the licensor receives a cross license under the licensee's patents, for which the licensor gives the licensee a grant-back royalty reduction, thereby reducing the dollar royalties payable to the licensor by the licensee (4a, infra).

a reduction in the royalty obligation which they are obliged to pay to Western Electric. The typical licensee counts the license under his patents to Western as a very small price to pay for that royalty reduction for the reason that in the vast majority of instances, Western is not a competitor of these licensees in the . . . sale of semiconductor devices on the commercial market, so there's no loss to the licensee in giving a license to Western" (R. XXV at 62); and

3. Western Electric's admission that more than 90% of its licensees chose the option of paying a portion of the royalty charged by Western Electric through cross licenses for which they received grant-back royalty reductions (R. XXVII at 835).

It is also clear that package licensing was the objective which Western Electric was seeking to achieve when it offered Stewart-Warner a ½% grant-back reduction if Stewart-Warner would take a license under Western Electric's entire semiconductor portfolio (or even under a package consisting of the Derick-Frosch, Andrus, Pfann and Kliemack patents), but refused to give it any such reduction in a single patent license under Derick-Frosch.

Western Electric's patent licensing program was 100% successful in achieving that package licensing objective. That is attested to by Western Electric's admission that—although the oxide masking process covered by the Derick-Frosch patent was one of the ten major process innovations made in the semiconductor industry between 1950 and 1968 (PX 100, p. 17) and the Derick-Frosch patent was undoubtedly the single most important patent in Western Electric's semiconductor patent portfolio—it never granted a license to anyone under the Derick-Frosch patent alone or in conjunction with one, two or three additional patents (R. XXVII at 835-836).

Evidence Relevant To Base For Computing Damages

Despite its status as an industry-dominating patent, the Derick-Frosch patent in suit on its face covers only oxide masking and oxide passivating steps that are used in manufacturing semiconductor wafers or chips—but are not used in the housing or encapsulation operations which take place after the wafers have been broken up into chips—and the parties have stipulated that the dollar value of the chips made by the Derick-Frosch process is only 1/6 of the dollar value of the finished devices in which the chips are housed (Final pretrial order, Schedule C-3, ¶ 14).*

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* The relationship between a semiconductor wafer, a semiconductor chip and a housed or finished semiconductor device is illustrated in the following drawings identified as Figures 1 and 2 respectively (based on DX 211):

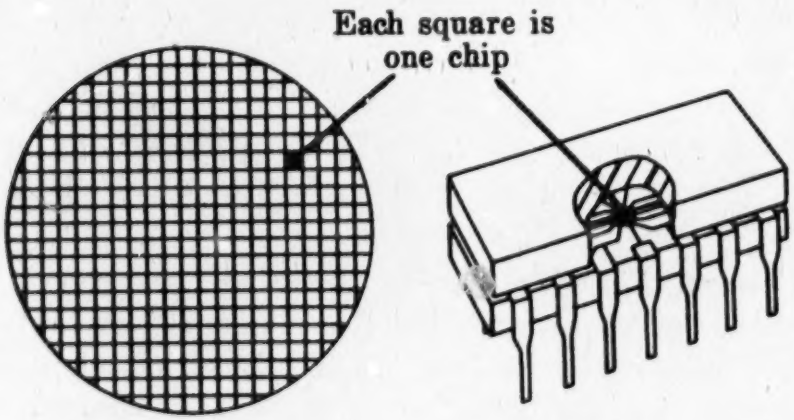


Figure 1 Figure 2

Fig. 1 represents a semiconductor wafer, and each square on the wafer represents an individual semiconductor chip. Fig. 2 represents a housed or finished semiconductor device in which 14 leads have been attached to one such semiconductor chip, after which the chip and its associated leads have been housed or encapsulated (cover broken away).

The testimony of Western Electric's economic expert, moreover, establishes that the semiconductor wafers or chips made by the Derick-Frosch process also incorporated at least four other major semiconductor inventions or innovations attributable to companies other than Western Electric (the silicon junction transistor, the diffused transistor, the planar transistor, and the integrated circuit), and that a fifth major innovation which Dr. Tilton described as "plastic encapsulation" (and attributed to General Electric) was used in the packaging or housing operation performed after the wafers had been broken up into chips (R. XXVII at 674-677; PX 100, pp. 16-17).*

The proofs also show that the encapsulation and housing operations performed on the semiconductor wafers or chips made by the Derick-Frosch process — i.e., the finishing operations which accounted for 5/6 of the dollar value of the finished semiconductor devices—took place outside the United States (R. XXVI at 402-403).

More specifically, Stewart-Warner shipped the semiconductor wafer or chips made by the Derick-Frosch process at its Sunnyvale, California plant to offshore assemblers that were not subsidiaries of Stewart-Warner or financially associated with it in any way; the encapsulation and housing operations were performed at the plants of the offshore assemblers; and the finished semiconductor devices were then shipped back to Stewart-Warner, with the offshore assemblers bearing the risk

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* Western Electric acknowledged the force of its expert's testimony in its reply brief in the Court of Appeals, stating (at p. 40) that it "has never disputed" either "that the manufacture of a housed device involves innovations other than the inventions of the Derick-Frosch patent" or "that the entire market value of the housed device is not attributable solely to the Derick-Frosch patent".

of loss in the meantime (R. XXVI at 397-433; DX 201-211).

The Decisions Of The Courts Below

The patent misuse issue in this case is succinctly stated in the following finding of fact of the Special Master (adopted by the District Court):

> "23. Western offered Stewart-Warner a grant-back reduction of ½% if Stewart-Warner would take a license under Western's entire semiconductor patent portfolio or under four specified semiconductor patents including the Derick-Frosch patent, but refused to give Stewart-Warner any grant-back reduction if it desired a license under the Derick-Frosch patent alone" (43a).*

The District Court resolved that issue against Stewart-Warner, holding that "Stewart-Warner's defense of misuse of the Derick and Frosch patent is not sustainable on the evidence of record in this case" because:

> "Viable economic alternatives were made available to Stewart-Warner by Western through the application of its royalty reduction formula, under which Stewart-Warner was offered a unilateral license under the Derick and Frosch patent, only, at a royalty rate which was 40 percent less than the 2½ percent royalty rate applicable to a unilateral license under all of Western's semiconductor patents" (24a).

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* Trial Judge Francis C. Browne of the United States Court of Claims, to whom Western Electric's earlier filed action for infringement of the Derick-Frosch patent by the United States had been assigned, was designated Special Master of the District Court for the Eastern District of Virginia after this case was consolidated for discovery proceedings with five other District Court actions for infringement of the same patent. Judge Browne proceeded to try this case in his role as Special Master even though the Court of Claims action (in which Stewart-Warner had been a third party defendant) was settled while this case was still in the discovery stage.

The Court of Appeals affirmed the District Court's resolution of that issue, saying:

> "In order to prevail on this claim, Stewart-Warner must have shown that Western did not give it a choice to take a license under the Derick-Frosch patent alone or in combination with other patents on reasonable terms. *Well Surveys, Inc.* v. *Perfo-Log, Inc.*, 396 F2d 15 (10th Cir. 1968). Stewart-Warner has not made such a showing. It is undisputed that Western gave it the choice to take the Derick-Frosch patent alone at one rate of royalty or a combination of the Derick-Frosch patent with other patents at different royalty rates. As *Well Surveys* teaches, 'freedom of choice is the controlling question,' p. 18. This makes important the finding of the district court that 'viable economic alternatives were made available to Stewart-Warner by Western through the application of its royalty reduction formula'" (10a).

Both Courts also ruled that Western Electric had not violated the 1956 antitrust consent decree. Explaining that ruling, the Court of Appeals said:

> "Stewart-Warner has not shown that it was treated any differently from any other potential licensee. The evidence showed that Western had never given a grant-back reduction when a single patent was licensed. In fact, the record shows that no one had ever sought the licensing arrangement Stewart-Warner proposed. It has not shown that Western granted the terms it sought to someone else and then refused to extend those same terms to Stewart-Warner. The 1956 decree does not require that all licensees be treated exactly the same, only that they not be discriminated against" (11a).*

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* A finding that the consent decree's licensing provisions had been violated would, of course, have required a holding that Western Electric was also guilty of patent misuse (*American Securit Co.* v. *Shatterproof Glass Corp.* (3 Cir., 1959), 268 F.2d 769, 778).

Turning to the damages issue, the Court of Appeals agreed with the District Court that the proper basis for computing the damages to be awarded to Western Electric was the entire value of the finished devices containing the semiconductor chips made by the Derick-Frosch process. More specifically, the Court of Appeals stated:

> "We think Western's patent monopoly is not being extended to production outside the United States contra to 35 U.S.C. § 271. Stewart-Warner's infringement occurred within the United States. Only the encapsulation occurred outside" (14a).

In that connection, the Court of Appeals did not allude to the stipulated fact that 5/6 of the total dollar value of the finished devices was attributable to the encapsulation operations which occurred outside the United States.

In further explanation of its affirmance of the award of damages made by the District Court, the Court of Appeals said:

> "Here, Western Electric had a well established licensing program under which it licensed the Derick-Frosch and other patents involved in the production of semiconductors based upon the selling price of the housed device. What Stewart-Warner wants us to do is to hold the 1½% rate intact, but significantly reduce the base. Under the case law, however, the district court can award damages based on an established royalty. In fact, the statute provides at least an award of a reasonable royalty. The action of the district court in providing for damages according to a previously established royalty rate is without error" (14a-15a).

But that statement did not take into account the fact that Western Electric's established royalty based on the selling price of the housed device (rather than the dollar value of the semiconductor chips) was predicated on a licen-

sing program involving approximately 400 patents, many of which expressly covered complete or finished housed devices.

The decision of the Court of Appeals thus encourages package licensing on the part of the owners of large patent portfolios by holding that it is permissible to treat package licensees and single patent licensees differently so long as the single patent licensee is given the "viable economic alternative" of a license under which the total dollar royalty is less than the net dollar royalty for a package license.

The Court of Appeals also used a definition of discrimination which has no support in economics or in law when it held that proof of discrimination required a showing that another single patent licensee had peen granted a license on the same terms that were sought by Stewart-Warner and refused by Western Electric. That definition obviously made it impossible for Stewart-Warner to prevail on its patent misuse defense, for as the Court of Appeals itself pointed out, Stewart-Warner was the *only* company which had ever requested a license under the Derick-Frosch patent alone (11a).

Finally, the decision of the Court of Appeals had the effect of rewarding Western Electric for its policy of preferring package licensees over single patent licensees by holding that the appropriate base for determining the amount of damages to be awarded to Western Electric is the same base that would have been used if Stewart-Warner had been a package licensee under Western Electric's entire porfolio of 400 product and process patents, rather than an infringer of the Derick-Frosch process patent alone.

REASONS FOR GRANTING THE WRIT

This Court should make it clear to the lower federal courts that the doctrine of patent misuse is not so restricted in its scope or operation as the Court of Appeals for the Fourth Circuit has held it to be in this case, by unequivocally holding that:

1. The existence of a viable economic alternative in the form of a single patent license for a total dollar royalty that is lower than the net dollar royalty for a package license is not the sole criterion for determining whether a particular patent licensor's royalty rate structure involves patent misuse; and

2. All owners of industry-dominating patents—not just those who are subject to injunctions embodied in consent decrees—are required to offer package licenses and single patent licenses on terms that are non-discriminatory in the sense that single patent licensees must be offered proportionally equal royalty rebates and other options that are offered to package licensees.

This Court should also hold that an award of damages based on the value of a finished product may not be made in a case where the patent in suit covers a process useful in producing only a portion of the finished product—particularly where (a) the patent owner admits that other inventions or innovations are used or incorporated in the finished product and that the entire market value of the finished product is not solely attributable to the use of the process covered by the patent in suit, and (b) the major portion of the dollar value of the finished product was added by processes or operations which took place outside the United States, beyond the reach of any U.S. patent.

I. Owners Of Industry-Dominating Patents Should Be Required To Offer Single Patent Licensees Proportionally Equal Royalty Rebates And Other Options That Are Routinely Offered To Their Package Licensees.

In *Laitram Corporation* v. *King Crab, Inc.* (D.C.Alaska, 1965), 245 F.Supp. 1019, 1021, Chief Judge Hodge held that the charging of different rates to companies located in different geographical areas for comparable leases or licenses under industry-dominating patents was discriminatory and constituted patent misuse.

The following year, in *Peelers* v. *Wendt* (W.D.Wash., 1966), 260 F.Supp. 193, Judge Boldt reached the same conclusion in a case involving the same patents that were involved in *Laitram* v. *King Crab,* stating:

> "On the record in the present case it is found in fact and law that the charging by plaintiff of rates unreasonably and unfairly discriminating between lessees of the patented machinery constituted a patent misuse during the period such rates were applied. Accordingly, no damages sustained during such period may be recovered by plaintiff" (260 F.Supp. 204).

Those cases were subsequently characterized by the Court of Claims as "cases in the past decade which at least lend color to, and may even directly support, the Government's position that differing prices or royalties to licensees can be improper and discriminatory" (*Carter-Wallace, Inc.* v. *United States* (Ct.Cl., 1971), 449 F.2d 1374, 1387).

Several years earlier, the Court of Appeals for the Sixth Circuit had been called on to interpret the meaning of the phrase "more favorable royalty terms" in the patent license agreement involved in *Prestole Corporation*

v. *Tinnerman Products Co., Inc.* (6 Cir., 1959), 271 F.2d 146. In its decision in that case, the Court of Appeals held that "the specified rate should not be the sole criterion by which to determine what was in fact the price paid for the license" (271 F.2d 152). The Court went on to say that "the value of the information, services and assistance contracted to be given . . . should be offset against the recited rate of royalty to determine what, in fact, were the royalty terms" (271 F.2d 153), and it concluded that the plaintiff in that case had been discriminated against by the defendant's issuance of a license providing "more favorable royalty terms" to another licensee.

Viewed in the light of the foregoing decisions, Western Electric's policy of making grant-back royalty reductions available only to its package licensees unquestionably violated the 1956 consent decree requirement that licenses be granted under "any, some or all" Western Electric patents on royalties that are "non-discriminatory as between licensees" (DX 158, pp. 7 and 9); and it also constituted patent misuse on the part of Western Electric (*American Securit Co.* v. *Shatterproof Glass Corp.* (3 Cir., 1959), 268 F.2d 769, 778; *Western Electric Company, Inc.* v. *Milgo Electronic Corporation et al.* (S.D.Fla., 1976), unreported decision printed commencing at page 48a, 50a).

But the Court of Appeals held that Western Electric was not guilty of either patent misuse or discriminatory treatment of Stewart-Warner (as an applicant for a single patent license) because Stewart-Warner had failed to prove that it was treated differently from other potential single patent licensees (although there admittedly had never been any other applicant for a single patent license).

The decision in this case thus represents a step backward in the law of patent misuse. That is especially true with respect to the definition of discrimination that was announced and applied by the Court of Appeals, for that definition is contrary to:

1. The testimony of Western Electric's Dr. Tilton, who said that only if "you give both [single patent and package] licensees the same options . . . under the economic definition of discrimination, there would be no discrimination . . ." (R. XXVII at 737-738); and

2. The definition of non-discrimination as requiring sellers to accord their customers proportionally equal terms in the area of promotional payments, facilities and services, which has been consistently applied by the federal courts in interpreting the provisions of Sections 2(d) and 2(e) of the Clayton Act, as amended by the Robinson-Patman Act (see, e.g., *Federal Trade Commission* v. *Simplicity Pattern Co., Inc.* (1959), 360 U.S. 55, 56-59; *State Wholesale Grocers* v. *Great Atlantic & Pacific Tea Co.* (7 Cir., 1958), 258 F.2d 831, 837-838).

At the very least, therefore, Western Electric should have offered Stewart-Warner a grant-back royalty reduction in a single patent license that was proportionally equal to the ½% grant-back reduction it had previously offered to Stewart-Warner if it would take a license under Western Electric's entire portfolio of 400 semiconductor patents, or even under a four patent package

consisting of the Derick-Frosch, Andrus, Pfann and Kliemack patents.

In more practical terms, this means that, as an alternative to taking a package license under Western Electric's entire portfolio of semiconductor patents at a royalty rate of 2½% with a ½% grant-back reduction for a cross license under its own semiconductor patents, Stewart-Warner shculd have been offered a .3% grant-back reduction in a license under the Derick-Frosch patent alone (for which Western Electric's standard royalty rate was 1½%). *A .3% royalty rebate would have been a bargain for Western Electric, moreover, inasmuch as it would have received from Stewart-Warner the same bundle of rights for which it had previously offered to give Stewart-Warner a ½% royalty rebate in a package license.*

Nor should Western Electric's refusal to give Stewart-Warner *any* grant-back reduction in a license under the Derick-Frosch patent alone be excused on the grounds that Western Electric feared that it might be charged with coercion for taking a cross license under Stewart-Warner's "meager" patent position (34a) relating to subject matter which Western Electric was not even using (DX 123) when it was granting to Stewart-Warner a license under one of the ten most important patents in the semiconductor field (PX 100, p. 17). *This is particularly true when Stewart-Warner had specifically and voluntarily requested that arrangement in writing* (DX 137) so that it might obtain the grant-back royalty reduction which Western Electric had previously offered if Stewart-

Warner would take a package license.*

Whether Western Electric's expressed fear of a charge of coercion were real or feigned makes no difference, however, for this Court's decision in *Transparent-Wrap Machine Corp.* v. *Stokes & Smith Co.* (1947), 329 U.S. 637, makes it clear that a mere *charge* of coercion is not enough—that *actual* coercion must be proved in order to establish that there has been either patent misuse or an antitrust violation. Thus, one of the questions which this Court left "open on our remand of the cause to the Circuit Court of Appeals" was whether the record contained evidence of *actual* coercion (329 U.S. 648).

In *Automatic Radio Manufacturing Co., Inc.* v. *Hazeltine Research, Inc.* (1950), 339 U.S. 827, decided three years after *Transparent-Wrap,* this Court took the same position, belittling a *charge* that the licensor had refused to grant a license under any of its patents to prospective licensees who were unwilling to take a license under all because there was no *proof* that the licensor had actually engaged in that practice (339 U.S. 831).

And in this case, the Stewart-Warner letter (DX 137) specifically requesting that Western Electric take a cross

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* As pointed out at pages 6-7 of this petition, the testimony of Western Electric's Q. W. Weist indicates that Western Electric withdrew the grant-back reduction it had previously offered with the object of forcing Stewart-Warner to take a license under the four-patent package that included not only Derick-Frosch but also the Andrus, Pfann and Kliemack patents which Stewart-Warner's patent department had determined were either invalid or not infringed by Stewart-Warner. Otherwise, Western Electric anticipated that its hundreds of package licensees might become restive and perhaps even challenge the validity of one or more of those three obviously weak patents, thereby disrupting Western Electric's lucrative licensing program.

license under Stewart-Warner's entire semiconductor patent portfolio (so that Stewart-Warner could obtain—in a license under the Derick-Frosch patent alone—the grant-back royalty reduction Western Electric had previously offered it) obviated any possibility of a finding that Stewart-Warner had been coerced into granting such a cross license to Western Electric.

The Court of Appeals' reliance on the decision in *Well Surveys, Inc.* v. *Per-Fo Log, Inc.* (10 Cir., 1968), 396 F.2d 15, is also misplaced, for when the Court of Appeals for the Tenth Circuit stated that "freedom of choice is the controlling question" (396 F.2d 18), it obviously used the term "freedom of choice" in the sense of freedom to choose between non-discriminatory alternatives, rather than freedom to choose between alternatives that discriminated against one class of licensees and in favor of another.

If there be any doubt on that score, that is still another reason why this petition for a writ of certiorari should be granted and this Court should unequivocally hold that owners of industry-dominating patents are required to offer single patent licenses and package licenses on terms that are non-discriminatory as between the two classes of licensees.

II. In Affirming The Damages Awarded By The District Court, The Court Of Appeals Misapplied The Entire Market Value Rule And Gave The Process Claims Of The Derick-Frosch Patent A Prohibited Extraterritorial Effect.

The entire market value rule was first set forth in the following passage from this Court's decision in *Westinghouse Co.* v. *Wagner Mfg. Co.* (1912), 225 U.S. 604, 614-

615:

> "But there are many cases in which the plaintiff's patent is only a part of the machine and creates only a part of the profits. His invention may have been used in combination with valuable improvements made or other patents appropriated by the infringer, and each may have jointly, but unequally, contributed to the profits. In such case, if plaintiff's patent only created a part of the profits, he is only entitled to recover that part of the net gains. He must, therefore, 'give evidence tending to separate or apportion the defendant's profits and the patentee's damages between the patented feature and the unpatented features, and such evidence must be reliable and tangible, and not conjectural or speculative; or he must show, by equally reliable and satisfactory evidence, that the profits and damages are to be calculated on the whole machine, for the reason that the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature.' *Garretson* v. *Clark,* 111 U.S. 120".

As so stated, the entire market value rule would appear to be clearly inapplicable to this case, in view of:

1. The testimony of Western Electric's expert witness, Dr. Tilton, who said that semiconductor wafers or chips manufactured by the Derick-Frosch process incorporated at least four other major semiconductor process or product innovations, and that still another major innovation would have been used in fabricating the finished devices after the wafers had been broken up into chips (R. XXVII, at 674-677; PX 100, pp. 16-17).

2. Western Electric's admissions, in its reply brief in the Court of Appeals (at p. 40), "that the entire market value of the housed device is not attributable solely to the Derick-Frosch patent" and "that the

manufacture of a housed device involves innovations other than the inventions of the Derick-Frosch patent".

3. The parties' stipulation that the dollar value of the semiconductor chips made at Stewart-Warner Microcircuits by the Derick-Frosch process was only 1/6 of the dollar value of the finished semiconductor devices in which those chips were subsequently housed for sale (Final pretrial order, Schedule C-3, ¶ 14).*

The Court of Appeals nevertheless affirmed the District Court's award of damages based on the entire market value rule, noting that "Western Electric had a well established licensing program under which it licensed the Derick-Frosch *and other patents* involved in the production of semiconductors based upon the selling price of the housed device" (14a, infra; emphasis supplied).

But the fact that the selling price of the housed device was the established royalty base for Western Electric's *package* licensees, who were licensed under *product* patents which expressly covered housed devices, is totally irrelevant to the determination of the base to be used in computing damages in an action for infringement of the Derick-Frosch *process* patent alone.

Indeed, Western Electric's admission that it never granted a license to anyone under the Derick-Frosch patent alone, or even in conjunction with one, two or three additional patents (R. XXVII at 835-836), makes

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* In that same stipulation, the parties agreed that 1½% was the established royalty rate for a license under the Derick-Frosch patent alone.

it clear beyond doubt that there could not possibly have been an established royalty base for a license under the Derick-Frosch patent alone.

If Western Electric felt that it was entitled to recover damages based on the entire value of the finished semiconductor products sold by Stewart-Warner, it could -- and should — have sued Stewart-Warner for infringement of the product claims appearing in the Pfann and Kliemack patents which, throughout its license negotiations with Stewart-Warner, it had doggedly asserted were infringed by the finished Stewart-Warner devices. But Western Electric's attorneys chose not to assert those patents in this action, thus indicating their agreement with Stewart-Warner's patent department that they were either invalid or not infringed by Stewart-Warner.

Nor should the entire market value rule have been held applicable merely because the proofs show that Stewart-Warner's finished semiconductor devices would not have functioned without the semiconductor chips made by the Derick-Frosch process. The proofs also show that the finished semiconductor devices would not function without the leads that were attached to the semiconductor chips or the housings in which the chips were encapsulated.

The entire market value rule does not, in short, apply to all patents covering inventions that are necessary to make a completed product functional. If that were the law, manufacturers of products including a plurality of patented devices would be exposed to the payment of multiple damage awards based on the entire value of the completed product in which all those devices were housed — a possibility that is totally at odds with this Court's

statement that damages may properly be awarded on the entire market value of a product only if its *entire* value is attributable to the patented feature (*Westinghouse Co.* v. *Wagner Mfg. Co.* (1912), 225 U.S. 604, 614-615).

In affirming the District Court's holding that the entire market value rule is applicable in this case, the Court of Appeals also gave a prohibited extraterritorial effect to the process claims of the Derick-Frosch patent, for the proofs show that (except for a few devices packaged at Stewart-Warner's Sunnyvale plant) all of the encapsulation and packaging processes and operations performed after fabrication of the semiconductive wafers or chips took place outside the United States (R. XXV at 402-403).

This Court settled the rule against extraterritorial application of U.S. patents once and for all in *Deepsouth Packing Co.* v. *Laitram Corp.* (1972), 406 U.S. 518, when it held that the manufacture of the constituent parts of a machine and the unassembled export of its elements for assembly and use outside the United States did not infringe the United States patent which covered the assembled machine, observing that "The statute makes it clear that it is not an infringement to make or use a patented product outside of the United States" (406 U.S. 527).

More recently, in *Clairol, Inc.* v. *Brentwood Industries, Inc.* (C.D.Cal., 1976), 193 USPQ 683, it was held that the process claims in a U.S. patent could not be infringed, as a matter of law, by sales in the United States of wigs made by the patented process in a foreign country. (The patentee in *Clairol* also asserted U.S.

product claims but failed to recover when those claims were held invalid.)

But the Court of Appeals' decision in this case gives the entire market value rule an expansive interpretation which has no extraterritorial limitation. There is no case law which suggests that it can be so interpreted.

The Court of Appeals' misapplication of the entire market value rule is an open invitation to Western Electric to use the process claims in its U.S. patents as a vehicle for garnering royalties from its licensees on the further foreign processing of semiconductor chips fabricated in the United States. This foreign processing is carried on by dozens of U.S. based manufacturers, and it totals massive sums.

This Court, by granting certiorari in this case, can make it clear to the lower federal courts that the entire market value rule may not be invoked to cover such foreign processing operations.

CONCLUSION

The questions presented by this petition are deserving of this Court's attention, and the writ of certiorari sought by petitioner should be issued.

Respectfully submitted,

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APPENDIX

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 79-1129

WESTERN ELECTRIC COMPANY, INC.,

Appellee,

v.

STEWART-WARNER CORPORATION,

Appellant.

No. 79-1130

WESTERN ELECTRIC COMPANY, INC.,

Appellant,

v.

STEWART-WARNER CORPORATION,

Appellee.

Appeal from the United States District Court for the Eastern District of Virginia, at Richmond.

D. Dortch Warriner, *District Judge.*

Argued January 8, 1980—Decided October 2, 1980

Before Widener and Sprouse, *Circuit Judges,* and Jones, *District Judge*•

• United States District Court for the District of Maryland, sitting by designation.

Albert E. Fey (William J. Gilbreth, David J. Lee, Fish & Neave; David Bender, Western Electric Company, Inc.; John S. Davenport, III, William R. Cogar, Stephen A. Northup, Mays, Valentine, Davenport and Moore, on brief) for Appellant/Cross-Appellee; Theodore R. Scott (McDougall, Hersh & Scott; Thomas G. Slater, Jr., Hunton & Williams, on brief) for Appellee/Cross-Appellant.

WIDENER, *Circuit Judge*:

Stewart-Warner Corp., defendant below, appeals from the judgment of the district court finding damages against it on account of patent infringement and deciding that its defenses of misuse and failure to comply with a consent antitrust decree in the district court in New Jersey were not well taken. Western Electric Co., plaintiff in the district court, appeals from the judgment of the district court that it not be awarded attorneys' fees in this as an exceptional case and also increased damages for infringement. We affirm the judgment of the district court in all respects.

Western Electric brought this action for patent infringement, claiming that Stewart-Warner infringed its Derick-Frosch patent No. 2,802,760 issued on August 13, 1957. It is uncontested that Western Electric is the owner of this patent, and infringement is not now contested. Western Electric sought damages from Stewart-Warner for its infringement, and also sought that such damages be increased pursuant to 35 U.S.C. § 284[1] and that it be

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[1] 35 U.S.C. § 284 provides in part:

> Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

awarded attorneys' fees pursuant to 35 U.S.C. § 285.[2]

The trial below was bifurcated, with the first hearing dealing with validity only and the second with all other issues. Both stages were tried by a Special Master, with the district court adopting the Master's findings pursuant to FRCP 53(e)(2).

Prior to the first hearing, Stewart-Warner challenged the validity of the Derick-Frosch patent on numerous grounds and also claimed noninfringement. At the first hearing, however, Stewart-Warner abandoned its claim of invalidity based on anticipation under 35 U.S.C § 102 and defended only on obviousness grounds. The first hearing resolved the question of obviousness in Western Electric's favor. That finding is not challenged here. The second hearing resolved all other issues raised. At that stage, Stewart-Warner contended that the patent in suit, although valid, was unenforceable because of Western Electric's misuse of that patent and violation of a court antitrust order in the district court in New Jersey. Both of those issues are argued on appeal. Various aspects of the award of damages were also contested in the second hearing, as is the case here.

The parties are involved in semiconductor manufacturing operations. The Derick-Frosch patent is a process patent that allows the use of silicon in the manufacture of semiconductors. It played an important role in the development of solid state devices and microelectronic components. Since the validity of the patent is not in issue and since a complete understanding of the intricacies of the process is not necessary for understanding

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[1] (Continued)

When the damages are not found by a jury, the court shall assess them. In either event the court may increase the damages up to three times the amount found or assessed. . . .

[2] 35 U.S.C. § 285 provides:

The court in exceptional cases may award reasonable attorney fees to the prevailing party.

the issues raised before us, we will not discuss the details of the patent nor its application in the manufacturing process. Following the briefing schedule, we will first deal with Western Electric's claims of error and then discuss the errors raised by Stewart-Warner.

In deciding Western Electric's claim for attorneys' fees and increased damages, a brief discussion of the dealings between the parties is necessary. For approximately eleven years prior to the institution of this lawsuit, Western Electric and Stewart-Warner had negotiated and disputed over the Derick-Frosch patent. These protracted negotiations proved fruitless, with the parties never able to agree upon a licensing agreement for the patent in suit.

In 1964, negotiations between the parties regarding the licensing of the Derick-Frosch patent began. At that time Stewart-Warner was not manufacturing semiconductors which would have required the use of the Derick-Frosch patent. These negotiations continued at a snail's pace. Western initially offered Stewart-Warner a license under one or all of its patents in its semiconductor portfolio. Later into the negotiations, Western indicated that if it took a royalty free grant-back license under Stewart-Warner's portfolio of patents, it would reduce the royalty rate it charged to Stewart-Warner. Western would not, however, allow a royalty rate reduction based on a grant-back license arrangement if Stewart-Warner sought licensing only under the one Derick-Frosch patent.

Stewart-Warner instead sought a bilateral[3] license under the Derick-Frosch patent with a grant-back license and concomitant royalty reduction to Western. Such an arrangement was sought, says Stewart-Warner, because it only needed a license under the one patent.

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[3] A unilateral license as referred to by the parties is a license by the patent owner to another to use the patent in return for a royalty. A bilateral license as so referred to is when each of the parties grants to the other the right to use certain patents belonging to the respective parties.

Western Electric would not agree to such an arrangement. It would only grant a unilateral license with a 1-½% royalty rate for the Derick-Frosch patent alone. Western refused Stewart-Warner's request, it claims, because it feared that in the future Stewart-Warner might claim that Western coerced it into such a one-sided agreement. Stewart-Warner sought to reassure Western by supplying a letter stating that the agreement was completely its idea and that no coercion was involved, but Western was not so reassured.

Some time after the negotiations were initiated, counsel for Stewart-Warner began to investigate possible patent misuse and antitrust abuse by Western of the Derick-Frosch patent. The theory initially espoused was that such arose from Western's licensing procedure in which it took grant-backs. Such procedure was discriminatory, counsel asserted, because it allowed Western to adjust the net balance royalty rate as it saw fit. Counsel reasoned that Western might have also violated a 1956 antitrust consent decree[4] which required Western to grant licenses for any, some or all of its patents for royalties that are non-discriminatory as between licensees. Counsel argued that refusal by Western to grant a royalty reduction through grant-back licensing when a potential licensee sought a license under one patent while allowing a royalty reduction if the licensee took a license under a package of patents was discriminatory and in violation of the consent decree. Such a violation, he asserted, would be tantamount to patent misuse.[5]

The stalemate between the parties continued with Western seeking the portfolio cross-licensing package and Stewart-Warner seeking a bilateral license only on the one patent with grant-back licensing of its portfolio. The parties remained hopelessly deadlocked. Thereupon, Western filed this suit in 1975.

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[4] *United States* v. *Western Electric, Inc.*, No. 17-49 (D. N.J. 1956).

[5] See *American Securit Co.* v. *Shatterproof Glass Co.*, 268 F2d 769 (3d Cir.), cert. den. 361 U.S. 902 (1959).

Western argues that the district court erred in not granting its request for increased damages and attorneys' fees. These awards, which are statutorily established, are within the discretion of the trial court to award. *Marvel Specialty Co.* v. *Bell Hosiery Mills. Inc.*, 386 F2d 287 (4th Cir. 1967), cert. den. 390 U.S. 1030 (1968); *Colgate-Palmolive Co.* v. *Carter Products, Inc.*, 230 F2d 855 (4th Cir.), cert. den. 352 U.S. 843 (1956). In fact, the statute permits the granting of attorneys' fees only in exceptional cases. We cannot reverse the district court's findings absent a finding that it abused its discretion in not making the awards that Western requested.

Western contends that circumstances do exist here to show that the trial court abused its discretion in not making the requested awards. It claims that Stewart-Warner knowingly and intentionally infringed the Derick-Frosch patent. It then asserts that Stewart-Warner deliberately delayed the licensing negotiations. Such a delay, it argues, shows bad faith on Stewart-Warner's part so as to justify the awarding of increased damages and attorneys' fees. The district court found that Stewart-Warner was "dilatory in its conduct of the license negotiations with Western." Further, the court found that the license negotiations were one-sided in that Stewart-Warner refused to take a license except under its own terms. The court concluded, however, that Stewart-Warner had not acted in bad faith.

Western contends that this finding is clearly erroneous. It presents no arguments, however, that rebut the district court's determination. We note, as did the district court, that the record shows that Western did not persist in its effort to enforce its patent in that it did not seek to litigate promptly the matter when it became apparent that the negotiations would not be successful. Instead, it chose to wait for years to bring this action. All of this being so, we cannot say that the district court abused its discretion in refusing to award increased damages because of Stewart-Warner's negotiation practices.

Western next claims that increased damages are required because of Stewart-Warner's unreasonable reliance on in-house counsel's opinions regarding patent misuse by Western. That attorney was the chief negotiator for Stewart-Warner in its licensing negotiations with Western. During the process, he became concerned that the Derick-Frosch patent was unenforceable. He communicated this belief in at least three in-house memoranda, sent in 1966, 1969, and 1970. All three of these memoranda were sent to D. A. Potter, Vice President of Stewart-Warner, with the 1966 memo also addressed to J. D. Coffey, General Manager of the Microcircuits Division. Copies of all three were sent to W. W. Miller, Vice President of Industrial Relations and Legal, and copies of the 1969 and 1970 memos were sent to Coffey and Bennett Archambault, President and Chairman of the Board of Stewart-Warner. Western first contends that there is no proof that Stewart-Warner's decision makers relied upon the advice of counsel regarding the unenforceability of the Derick-Frosch patent. It argues that the only testimony in the record regarding such reliance is that of Coffey who was not a decision maker. That argument overlooks the fact, however, that copies of the three memoranda were sent to the decision makers of Stewart-Warner. It certainly is not incredible that these men read the opinion of counsel and then directed their actions accordingly. The finding of the master adopted by the district court that "there was sufficient evidence of reliance by Stewart-Warner on a supposed defense" is not in our opinion clearly erroneous.

Western further contends that even if there were reliance, that such reliance was unreasonable. Basing its contentions upon *General Electric Co.* v. *Sciaky Brothers, Inc.*, 415 F2d 1068 (6th Cir. 1969), Western claims that Stewart-Warner's reliance on in-house counsel was unreasonable as a matter of law. *Sciaky* does not, however, require a finding that the reliance was unreasonable. It instead discussed the theory that liability for increased damages may not be available if there is an "honest

doubt" as to liability. And the court stated that "[o]f course we recognize that a good-faith opinion by competent and independent patent counsel may be important evidence to be weighed on the issue of 'honest doubt' of patent validity." *Sciaky* at 1073.

Indeed, in *H. K. Porter Co., Inc.* v. *Goodyear Tire and Rubber Co.*, 536 F2d 1115 (6th Cir. 1976), the same court which handed down *Sciaky*, construed that case in quite the opposite manner than that sought by Western. Goodyear in that case had opinions both from in-house counsel and outside counsel that its product would not infringe a valid patent. The court held "this evidence is competent to show that Goodyear had an 'honest doubt' as to the validity of the patents and as to noninfringement." *Porter* at 1124. We think that *Porter* states the proper rule. Just because an attorney is in-house counsel does not mean that his opinions are necessarily suspect. While Stewart-Warner might be on firmer ground in this case had it sought the opinion of an outside attorney, it cannot be said that the opinion of in-house counsel must simply be disregarded as a matter of law. The fact that the attorney was in-house counsel, of course, should be weighed along with all the other evidence in the case as to whether or not Stewart-Warner was acting in good faith or as *Porter* phrases the question whether it had an "honest doubt" as to liability. We reject the contention of Western that the in-house attorney's opinions on patent misuse and whether or not Western had violated the New Jersey consent decree were absurd. Simply because the district court rejected these defenses does not justify an inference of absurdity. On the whole case, we agree with the conclusion of the master and the district court that "it cannot be said that it was an open and shut case all along for either party."

Likewise, we find no error in the district court's refusal to award attorneys' fees. Such fees are usually awarded to prevent gross injustice and, as we have previously noted, are awarded only in exceptional cases. *Stillman* v. *Edmund Scientific Co.*, 522 F2d 798 (4th Cir.

1975); *H. K. Porter Co.* v. *Black and Decker Mfg. Co.*, 518 F2d 1177 (7th Cir. 1975). That is not the case here. The finding of the district court, approved by us, that this was not an open and shut case all along for either party, is sufficient to justify its refusal to award attorneys' fees. There certainly was no gross injustice done to Western by Stewart-Warner's defense of the claim.

In its cross-appeal, Stewart-Warner claims error in the district court's finding that Western Electric did not misuse the Derick-Frosch patent. It advances three grounds for such misuse. First, Western misused the patent by refusing to give Stewart-Warner a royalty reduction for a grant-back license of Stewart-Warner's portfolio of patents in a license of the Derick-Frosch patent alone. Second, misuse is shown by Western's insistence that Stewart-Warner pay royalties on the sales price of the finished semiconductor device instead of on the value of the chips themselves. Third, misuse is shown by Western's refusal to settle this lawsuit under the ⅓ and ½ liability formula Western had devised and used in tne settlement of other such suits pending along with this one.

Stewart-Warner's primary contention is that Western misused its patent by refusing to allow a grant-back reduction if Stewart-Warner took a license under the Derick-Frosch patent alone. The negotiations were initiated with Western offering a license under one or more of its patents with or without a grant-back reduction. There was discussion of the idea of licensing all or most of Western's semiconductor patents. As the negotiations further continued, four of Western's patents were set out for special consideration.* When Stewart-Warner decided it needed and wanted a license under the Derick-Frosch patent only, Western would not allow a grant-back reduction against a royalty of 1½%.

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*Those patents were Nos. 3,122,817 (Andrus-4); 2,950,-425 (Pfann-15); 3,165,811 (Kleimack-10); and 2,802,760 (Derick-Frosch).

By refusing the grant-back, Stewart-Warner claims that Western committed patent misuse and especially that it violated a 1956 antitrust consent decree which Western had entered into which required that it grant licenses under "any, some or all" of its patents with a royalty which is "non-discriminatory as between licensees." *United States* v. *Western Electric, Inc.*, No. 17-49 (D. N.J. Jan. 24, 1956). Stewart-Warner's claim is that Western sought to coerce it into taking a package license of more than one product as opposed to a license under one patent only.

We think the above contention as to misuse by Stewart-Warner is not well taken. This is not a case in which Western refused to grant Stewart-Warner any license other than a license of a package of patents, as in *American Securit Co.* v. *Shatter-proof Glass Corp.*, 268 F2d 769 (3d Cir. 1959). Here, Western would not take a grant-back license so as to lower the cash royalties to be paid by Stewart-Warner. The fact that Stewart-Warner would have preferred to pay less cash, with the balance payable by a grant-back of a license to operate under its patents, is insufficient to make out a case of coercive package licensing. In order to prevail on this claim, Stewart-Warner must have shown that Western did not give it a choice to take a license under the Derick-Frosch patent alone or in combination with other patents on reasonable terms. *Well Surveys, Inc.* v. *Perfo-Log, Inc.*, 396 F2d 15 (10th Cir. 1968). Stewart-Warner has not made such a showing. It is undisputed that Western gave it the choice to take the Derick-Frosch patent alone at one rate of royalty or a combination of the Derick-Frosch patent with other patents at different royalty rates. As *Well Surveys* teaches, "freedom of choice is the controlling question," p. 18. This makes important the finding of the district court that "viable economic alternatives were made available to Stewart-Warner by Western through the application of its royalty reduction formula." Stewart-Warner has not shown this finding to be clearly erroneous.

We also do not think Western was shown to have violated the 1956 decree of the district court in New Jersey. Stewart-Warner has not shown that it was treated any differently from any other potential licensee. The evidence showed that Western had never given a grant-back reduction when a single patent was licensed. In fact, the record shows that no one had ever sought the licensing arrangement Stewart-Warner proposed. It has not shown that Western granted the terms it sought to someone else and then refused to extend those same terms to Stewart-Warner. The 1956 decree does not require that all licensees be treated exactly the same, only that they not be discriminated against. The finding of no discrimination of the district court is amply supported by the record.

Stewart-Warner next claims patent misuse in Western Electric's litigation settlement practices after the inception of and prior to the conclusion of this lawsuit. Stewart-Warner presents no facts in the record to show that the agreements reached in those instances were more than compromises of Western's claims for royalties. We therefore agree with the district court that such action does not constitute patent misuse, and find no need to discuss Western's various detailed defenses.

Stewart-Warner also claims patent misuse in Western's method of computing royalties for the Derick-Frosch patent. Stewart-Warner claims that Western sought to extend its monopoly beyond the Derick-Frosch patent by basing royalties on the sales of the finished semiconductor devices instead of the fair market value of the chips. As the district court noted, such a method is simply more convenient because it is much easier to ascertain the selling price of the finished product than the fair market value of one of its components. Without more, such a provision is not patent misuse. A related subject with respect to damages is discussed further along in the opinion with supporting authorities.

Stewart-Warner's reliance upon *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100 (1969), is misplaced. Hazeltine's licensing agreements required licensees to pay a royalty rate based on final sales of products that might not have used any of Hazeltine's patents. The Court held that conditioning the granting of licenses upon royalty payment on products which do not use the patent licenses amounted to patent misuse. It was not the royalty based upon a finished product that concerned the Court, but, instead, the requirement that Zenith pay royalties on all of its products manufactured whether Hazeltine's patents were used or not. Such is not the case here. All of the housed semiconductors at issue make use of the Derick-Frosch patent. In fact, Western's standard package licensing provides for the payment of royalties only on those products which include an invention owned by Western.

Finally, Stewart-Warner claims that the district court erred in the formula that it used to compute damages to be paid by Stewart-Warner to Western Electric. The parties below stipulated that the single patent royalty rate for the Derick-Frosch patent was 1½%. The parties also stipulated the dollar amounts to be used as a base for calculating damages under three different theories (1) the dollar amount of the finished semiconductor devices transferred by Stewart-Warner within the period in question; (2) the dollar amount of the chips made by Stewart-Warner in the United States and transferred by it to offshore assembly plants, plus the dollar amount of finished semiconductors made completely in this country; and (3) the dollar amount of chips made by Stewart-Warner and transferred to offshore assembly facilities. plus the dollar amount of chips used in semiconductors processed in this country. The district court assessed damages based upon the finished semiconductors represented by the first theory above.

An understanding of the difference between a chip and the semiconductor becomes of some consequence now. Briefly, silicon is formed into cylinders and sliced into

wafers. The Derick-Frosch process then comes into play scoring the wafers with tiny squares. The wafer is split along the squares with each resulting square, then called a chip, used in a semi-conductor device. A semiconductor device consists of a chip with many leads connected to various parts of the chip. This chip with its leads are housed in plastic to hold the leads to the chip in place. The leads are then connected to the electronic device in which the semiconductor is used.

After thoroughly examining this relationship, the district court concluded that the market value of the housed conductor was the appropriate base for determining damages. It concluded that substantially all the market value of the device was derived from the chip itself, not the leads or the plastic enclosure. The process patented under the Derick-Frosch allowed the use of silicon to replace germanium, which had been less satisfactory, and as such the patent was a leading one in its field.

The court also noted that the base used by Western in its licensing contracts was the housed device and not the chip, and that if Western had in fact used the value of the chip, it probably would have used a substantially larger royalty rate than it was using. The court also considered the convenience of such a method because of the easily identifiable market value of the finished product and the fact that the chip itself is not a regularly marketed product.

Included in the total damages was the value of some housed devices in which the housings were made outside the United States. Stewart-Warner manufactured the chips within the United States and shipped them out of the country for encapsulation. The finished product was then shipped back to Stewart-Warner. Stewart-Warner claims that the court below committed error in basing the damage award upon the housed devices instead of the chips themselves because by so doing the court gave extraterritorial effect to the Derick-Frosch patent and misapplied the entire market value rule. Its first argument is easily disposed of.

We think Western's patent monopoly is not being extended to production outside the United States contra to 35 U.S.C. § 271.[7] Stewart Warner's infringement occurred within the United States. Only the encapsulation occurred outside. In addition, the court did not conclude that Stewart-Warner sold the chips to an independent business outside the United States. Instead, it held, considering all of the facts, that Stewart-Warner merely shipped the chips to a bailee outside the United States who housed them and returned them to Stewart-Warner. Therefore, the court concluded that it was appropriate to include these devices in the final measure of damages. We agree with this conclusion.

In *Marvel Specialty Co.* v. *Bell Hosiery Mill, Inc.*, 286 F2d 287 (4th Cir. 1967), we recognized the well accepted rule that if a royalty has been established for the patented product, that royalty rate is the best measure of damages. Here, Western Electric had a well established licensing program under which it licensed the Derick-Frosch and other patents involved in the production of semiconductors based upon the selling price of the housed device. What Stewart-Warner wants us to do is to hold the 1½% rate intact, but significantly reduce the base. Under the case law, however, the district court can award damages based on an established royalty.[8] In fact, the statute provides at least an award of a reasonable royalty.[9] The action of the district court in providing

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[7] 35 U.S.C. § 271 provides in pertinent part:

> (a) Except as otherwise provided in this title, whoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.
>
> . . .

[8] *Marvel Specialty Co.* v. *Bell Hosiery Mills, Inc.*, supra; *Tektronix, Inc.* v. *United States*, 552 F2d 343 (Ct. Cl. 1977).

[9] 35 U.S.C. § 284.

for damages according to a previously established royalty rate is without error.

Stewart-Warner contends additionally that the district court incorrectly applied the entire market value rule to this case. The court below found that the value of the device was "primarily, if not entirely" derived from the chip itself. The fact that the cost of producing the chips is small as compared to the total cost of production of the final product is not necessarily determinative. A more critical fact is that the semiconductor derives substantially all, if not its entire, value from the use of the Derick-Frosch patent. The district court therefore correctly determined that the sales price of the finished product is a proper base for the computation of damages. In making such a determination, that court correctly applied the principle set out in *Westinghouse Co.* v. *Wagner Mfg. Co.*, 225 U.S. 604, 614-15, where the Court stated that damages (referring there to profits) are properly calculated on the entire product when "the entire value of the whole machine, as a marketable article, is properly and legally attributable to the patented feature." [Citation omitted.]

Accordingly, the judgment of the district court is affirmed. Each party to the appeal will bear its own costs.

AFFIRMED.

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
RICHMOND DIVISION

CIVIL ACTION NO. 75-0468-R

WESTERN ELECTRIC COMPANY, INC.

vs.

STEWART-WARNER CORP.

ORDER

(Filed Dec. 11, 1978)

The Court has studied with care the Report, Findings and Conclusions, as amended, (hereinafter "Report") of the Special Master, filed herein on 3 May 1978. The Court has considered the extensive briefs supporting and excepting to the Report. The Court then reviewed the Report and considers that the Report, itself, amply refutes the exceptions taken thereto.

Being of the opinion that the Report adequately states the law applicable to the facts properly found[1], this Court will refrain from expanding on the Report. The Report of the Special Master filed herein on 3 May 1978 is AFFIRMED and ADOPTED as the opinion and decision of this Court.

And it is so ORDERED.

Judgment will enter accordingly.

Let the Clerk send a copy of this order and judgment to all counsel of record.

/s/ D. Dortch Warriner
United States District Judge

Date: 8 December 1978

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[1] Certain minor errors in findings exist which do not affect the conclusions.

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
RICHMOND DIVISION

IN RE: Western Electric Company, Inc.
Semiconductor Patent Litigation
Multidistrict Litigation Docket No. 244
Civ. No. 75-0468-R

WESTERN ELECTRIC COMPANY,
INCORPORATED,

Plaintiff,

vs.

STEWART-WARNER CORP.,

Defendant.

REPORT OF SPECIAL MASTER

(Filed May 8, 1978)

*BROWNE, *Trial Judge*: Plaintiff, Western Electric Company, Incorporated (Western), is the owner of Derick and Frosch United States Patent 2,802,760, issued August 13, 1957. The patent was held valid in prior proceedings which were limited to the issue of validity of the patent, *vel non*.[1]

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* Hon. Francis C. Browne, Trial Judge, United States Court of Claims, sitting as Special Master, United States District Court for the Eastern District of Virginia by order of reference from Hon. D. Dortch Warriner, United States District Judge, Eastern District of Virginia.

[1] Trial of the issues in this case has been bifurcated, the issue of validity of plaintiff's Derick and Frosch Patent No. 2,802,760, issued August 13, 1957, having been previously tried and concluded in favor of plaintiff. All remaining issues have now been tried before the Special Master without a jury. This report constitutes the report of the Special Master under *FED. R. CIV. P.* 53 (e)(1) on all issues other than validity of the patent in suit.

Defendant, Stewart-Warner Corp. (Stewart-Warner), asserts in this, the concluding phase of the litigation that, notwithstanding the validity of the patent, it is unenforceable as a consequence of Western's misuse thereof and/or Western's violation of an antitrust decree[2] requiring Western to license the patent in suit to applicants on nondiscriminatory terms. These are nonstatutory, affirmative, equitable defenses which have been properly pleaded and tried in this action.

The parties have stipulated that if the patent is enforceable, infringement is conceded.

The parties have also stipulated that the royalty rate to be used in computing a reasonable royalty, if Western is entitled to recovery, is 1½ percent. The parties are in disagreement, however, as to which of three alternative bases the rate is to be applied. They have stipulated the dollar amounts of the respective bases, selection of the applicable base being left to the court.

It is held that Western's Derick and Frosch patent 2,802,760 has been infringed by Stewart-Warner, has not been misused, and Western has not violated the antitrust decree by refusing to license Stewart-Warner. Accordingly, the patent is enforceable and Western is entitled to recover from Stewart-Warner for the infringement. 35 U.S.C. §§ 281, *et seq.*

The bases upon which the foregoing conclusions have been reached and the amount of recovery has been computed, are set forth herein. This opinion and the appended findings of fact and conclusions of law, to the extent that the court adopts them, shall be considered as the findings and conclusions of the court. *FED. R. CIV. P.* 52(a).

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[2] *United States of America* v. *Western Electric Company, et al.*, Civil Action 17-49, United States District Court for the District of New Jersey. (Final judgment entered January 24, 1956.) [1956] TRADE REG. REP. (CCH) ¶ 68246.

I. *Enforceability*

A. *The Antitrust Decree*

The Derick and Frosch patent, although issued after entry of final judgment in the New Jersey antitrust decree in 1956, is subject to the provisions of that decree since the decree specifically applied to future Western (Bell System) patents, as well as its existing patents.

The decree orders and directs Western to grant "to any applicant who shall make written application therefor * * *, non-exclusive licenses under all claims of any, some or all existing and future Bell System patents to make, have made, use, lease and sell any or all equipment as desired by the applicant * * *." The decree further provides that such licenses are "to be at reasonable royalties" but they are not applicable to "patents or inventions made more than five (5) years after the effective date of the license."

In the event the parties are unable to agree within ninety (90) days "upon reasonable royalty or other terms" *either* the applicant or Western may apply to the court (United States District Court for the District of New Jersey) "for the determination of reasonable royalties and other terms." The court established the respective burdens of proof in such case as follows:

> In any such proceeding the burden of proof shall be on the defendant [Western] to establish the reasonableness of royalties or other terms requested by it, and on the applicant [Stewart-Warner] to establish the reasonableness of royalties or other terms requested by the applicant [Stewart-Warner].

Licenses granted by Western may be conditioned on "payment of a reasonable royalty, if applicable, which shall be non-discriminatory as between licensees." The decree takes into account the possibility that the license may be conditioned, in whole or in part, on the exchange of licenses or adjustment or elimination of royalties "to reflect a bona fide estimate of the values of such licenses."

Such licenses "shall not be deemed to discriminate between licensees," according to the language of the decree.

Bona fide compromises of claims for accrued royalty are also deemed by the decree to be nondiscriminatory.

The decree, in essence, requires that the terms of licenses granted by Western be nondiscriminatory, whether unilateral (conditioned upon payment of royalties in terms of money only) or bilateral (upon adjustment or elimination of money royalty payments where licenses are exchanged). In the latter case, the only requirement to assure nondiscrimination is that the adjustment or elimination of royalties "reflect a bona fide estimate of the values of such licenses."

The decree does not set forth any specific criteria for compromise of claims for accrued royalties except that such compromise shall be bona fide.

B. *Contentions of the Parties*

Stewart-Warner contends, in effect, that the value assigned by Western to the "grant-back" license which Stewart-Warner offered to Western as consideration of a royalty reduction does not "reflect a bona fide estimate of the values of such licenses." Western has, in effect, placed a zero valuation on the "grant-back" license offered by Stewart-Warner, Western taking the position that it does not need any license from Stewart-Warner and that a grant-back reduction in the royalty requested of Stewart-Warner might be considered a gratuity and thus subject Western to a charge of discrimination by its existing or prospective licensees.

Stewart-Warner also charges that Western's "post-suit" compromise of claims for accrued royalties due from other infringers discriminated against Stewart-Warner since Western settled for from one-third to one-half of the royalties which would have been due Western if the infringers had been licensed under the Western patents. Stewart-Warner contends that Western was obligated to disclose to Stewart-Warner the "settlement formula"

under which Western and the other infringers agreed to settle their respective disputes. Stewart-Warner, in any event, learned of the "settlement formula" from one of the infringers with whom Western reached a settlement. Western's conduct in settling with other infringers while refusing to settle with Stewart-Warner is alleged to be patent misuse which renders Western's Derick and Frosch patent unenforceable.

Western contends that its actions are in no way in violation of the antitrust decree and that it has not misused its patent in any respect.

C. License Terms Offered by Respective Parties

Western originally offered a unilateral license to Stewart-Warner under its entire semiconductor portfolio of patents at a royalty rate of 2½ percent of the sale price of "housed devices" in which silicon "chips" or "dice" made by the Derick and Frosch processes were incorporated. Later Western indicated that if, upon review of Stewart-Warner's patent portfolio (including anticipated developments which might occur in the ensuing 5 years), Western wished to take a royalty-free, "grant-back" license under Stewart-Warner's patents, Western would reduce the royalty rate to 2 percent in consideration of the "grant-back." If, on the other hand, Stewart-Warner wanted a bilateral license under less than all of the patents in Western's semiconductor portfolio, the 2½ percent unilateral royalty rate would be "shaded" downward, depending on the number of Western patents to be licensed.

When Stewart-Warner requested a license under the Derick and Frosch patent *alone*, Western "shaded" the royalty rate of 2½ percent to 1½ percent (a 40 percent reduction, in accordance with Western's nondiscriminatory formula for licensing less than all of its semiconductor patents), on the basis of a unilateral license but would not take a "grant-back" license from Stewart-Warner under its existing and prospective (5-year) patent portfolio. Stewart-Warner, on the other hand, insisted on a bilateral license, giving Western a royalty-free

"grant-back" license, for which it demanded a further reduction of the royalty rate to 1 percent.

Western refused to accept the terms offered by Stewart-Warner. fearing that its acceptance of the benefit of all of Stewart-Warner's patent portfolio, while licensing Stewart-Warner under only one of Western's patents under a bilateral license, might subject Western to a charge of coercion, discrimination, misuse or violation of the antitrust decree. Stewart-Warner's patent counsel scoffed at Western's fears, characterizing them as "farcical." Western's position, however, appears to have had some merit in view of the fact that there are cases in which parties to patent suits have asserted a defense of patent misuse where licensors are alleged to have coerced licensees to give "grant-back" licenses as a condition of obtaining a license from the patentee. (*See,* for example, *Transparent-Wrap Machine Corp.* v. *Stokes & Smith Co.,* 329 U.S. 637 (1947)).

Thus, an impasse was reached between Western and Stewart-Warner in their prelitigation negotiations which began early in 1964. Stewart-Warner did not want to pay more than a 1 percent cash royalty rate for a license under the Derick and Frosch patent, alone, justifying its position on the contention that Western should take a royalty-free "grant-back" license from Stewart-Warner since Western had taken "grant-back" licenses from others. Western, on the other hand, insisted on a 1½ percent unilateral, cash payment royalty rate—period.[3]

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[3] It is now agreed between the parties that in the event the Derick and Frosch patent is held to be enforceable, the royalty rate will be 1½ percent. However, Stewart-Warner insists that the rate be applied to the value of the silicon "chips." or "dice," rather than the "entire market value of the "housed devices." If the rate is applied to the value of "housed devices," Stewart-Warner seeks, in any event, to exclude from computation "housed devices" which were made outside the United States with "wafers," "chips" or "dice" which were made in the United States, shipped abroad, encapsulated, and returned to the United States in "housed devices."

D. *Defense of Laches*

Stewart-Warner asserts that Western is guilty of laches in delaying the filing of an action for infringement for over 5 years after the licensing negotiations reached an impasse. It also suggests that the delay of more than a year after expiration of the Derick and Frosch patent, being unexplained, constitutes laches.

In support of its claim that it has been prejudiced by Western's delay in instituting litigation, Stewart-Warner contends that some handwritten notes of a Western employee were lost or destroyed in the interim, thus depriving Stewart-Warner of material evidence relating to its invalidity defense. The record does not indicate when the notes were lost or destroyed except that, during discovery in this case, the witness could not find the notes where he thought they had been kept. Since the notes were understood to have been made prior to the filing of the application which matured into the patent in suit, it cannot be inferred that the notes would have been available even if this litigation were started the day the patent issued. In any event, it is not at all certain that the notes would be relevant to or determinative of any issue in this case.

Stewart-Warner has failed to establish either that it has been prejudiced by the delay or that it relied in any way on Western's failure to institute suit sooner than it did. Indeed, Stewart-Warner could have sought declaratory judgment relief if, in fact, it desired an early determination of the issues of infringement, validity or enforceability of the Derick and Frosch patent. Moreover, it could have applied to the District Court for the District of New Jersey for a license if it felt that it was entitled to a license under the terms rejected by Western. The fact that Stewart-Warner continued its infringement and set aside a contingency reserve to cover its potential liability negatives any inference that Stewart-Warner either acted or refrained from acting in reliance on Western's delay, to Stewart-Warner's detriment.

Stewart-Warner's equitable defense of laches fails for lack of proof of Stewart-Warner's reliance on Western's delay or any prejudice to Stewart-Warner's defense of this action as a consequence thereof.

E. *Conclusion as to Enforceability*

Stewart-Warner's defense of misuse of the Derick and Frosch patent is not sustainable on the evidence of record in this case. It was not discriminatory as between licensees for Western to have refused to grant a license to Stewart-Warner under the Derick and Frosch patent, alone, at a royalty rate of 1½ percent on condition that Western accept a royalty-free "grant-back" license from Stewart-Warner under all of its existing patents and all developments made within 5 years of the date of the license. Western's evaluation of Stewart-Warner's patent position and potential at the time was bona fide. Furthermore, Western's offer of a license under all of its semiconductor patents at a royalty rate of 2 percent with a "grant-back" license from Stewart-Warner would not have been a misuse of the Derick and Frosch patent. Likewise, Western's offer of a license under all of its semiconductor patents at a royalty rate of 2½ percent without any "grant-back" licenses is not a misuse of the Derick and Frosch patent. Viable economic alternatives were made available to Stewart-Warner by Western through the application of its royalty reduction formula, under which Stewart-Warner was offered a unilateral license under the Derick and Frosch patent, only, at a royalty rate which was 40 percent less than the 2½ percent royalty rate applicable to a unilateral license under all of Western's semiconductor patents.

Western's settlement with infringers for sums which were from one-third to one-half of the amount which would have been due Western if the infringers had been licensed, was not in violation of the decree of the United States District Court for the District of New Jersey, since there is no evidence that those settlements were not bona fide compromises of Western's claims for accrued royalties.

The patent having been held valid and enforceble, and infringement having been conceded, the only matter which remains for determination is the amount which Western is entitled to recover from Stewart-Warner for the infringement under the applicable sections of Title 35 United States Code.

II. *Recovery*

A. *Applicable Royalty Rate*

The parties having agreed that the royalty rate to be employed in determining the amount to be recovered by Western is 1½ percent. This, being the rate at which Western was willing to grant a unilateral license to Stewart-Warner prior to the litigation, is deemed to be not less than a reasonable royalty, assuming it is applied to a realistic base.

B. *Base To Which Royalty Rate Is Applied*

The parties are in disagreement as to the base to which the agreed royalty rate should be applied. Western contends that the value of the "housed device" embodying a "chip" or "die" made by the Derick and Frosch process should be used as the base since the entire market value of the "housed device" is dependent on the properties and performance of the "chip" or "die" made by the patented process. Western also points out that its licenses require that the royalties be computed on the value of the finished devices.[4]

Stewart-Warner argues that the "entire market value" rule is applicable only when the entire value of the finished product is derived from the patented feature. Stewart-Warner states that the rule is inapplicable in the present case since the patent in suit is directed to the

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[4] Western admits that due to an unintended loophole in some of its licenses, a few licensees were permitted to use the value of the "chip" as the base, provided there was a bona fide arm's-length sale of "chips," alone, and where the sale price reflected the true market value of the "chips," including a margin of profit for the seller.

process of making the silicon "wafers" from which the "chips" or "dice" are formed, and the "chips" or "dice" thus formed are used in devices which incorporate innovative features attributable to others, such as Texas Instruments and Fairchild, rather than the Western Electric patent in suit.

An explanation of the sequence of operations and material used in manufacturing silicon semiconductor devices may place the problem in a proper context for evaluation of this argument. In the first place, it is necessary to obtain silicon in a virtually pure state. The material is available from commercial sources, such as Dow-Corning. To be subjected to the Derick and Frosch process, it must be in a suitable configuration, such as a circular "wafer," "disc," or "slice." In practice, the silicon is first formed into cylinders of the desired diameter, ranging from less than one inch to a few inches in diameter. The cylinder is then sliced by the cylinder manufacturer into "wafers" or "discs" which are a few millimeters in thickness.[5] The wafers are sent to the customers of the wafer manufacturer, who then subject the silicon wafers to the patented Derick and Frosch process.

The Derick and Frosch process ultimately produces a silicon wafer with a surface which appears to be "scored" into a few hundred tiny squares or rectangles. The wafer is then fragmented along the score lines to form a few hundred semiconductor elements called "chips" or "dice." Each "die" (a few millimeters square and less than a few millimeters thick) has the desired electronic characteristics of a silicon semiconductor. Only one "die" or "chip" is used to make each "housed" semiconductor device. Thus, one wafer provides enough tiny "chips" or "dice" to make a few hundred "housed" semiconductor devices.

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[5] The silicon is so valuable that the "sawdust" resulting from the slicing operation is recovered and reused by the cylinder manufacturer.

Each semiconductor device is made up of 14 or more "leads" connected to various parts of the "chips." The "chip" and associated "leads" are "housed" in plastic or other medium to hold the "leads" in place so that the free end of each "lead" may be connected to the appropriate part of the electronic device in which the "housed" semiconductor device is to be used. The dimensions of the "housed devices" range from a fraction of an inch in diameter (for those of circular configuration) to ½ by 1 inch (for those of rectangular configuration). The full impact of the relationship of each "chip" to each finished or "housed" semiconductor device can be appreciated best by observing Defendant's Exhibit 211.

It is only as a result of the use of the Derick and Frosch process that the variety of "housed" devices, exemplified by Defendant's Exhibit 211, can be produced in the quantities and at a price which makes the "housed" devices marketable commodities, *per se*. Whereas the average value of each "chip" may be just a few cents, the average value of the marketable "housed" devices is from 5 to 8 times the average value of the "chip" housed therein.

The evidence in this case further shows that germanium semiconductor devices, similarly housed, were less satisfactory and less economical than the silicon semiconductors made by the Derick and Frosch process. In fact, the silicon semiconductors made by the Derick and Frosch process superseded and displaced the germanium devices throughout the semiconductor industry. The dominance of silicon as the standard semiconductor in the electronics industry became such that one area in California where silicon semiconductors were being manufactured and incorporated in finished devices was nicknamed "Silicon Valley." It is clear from the record in this case that the *entire market value* of the finished or "housed devices" is primarily, if not entirely, attributable to the process by which the "chips" were made, not to the design of the "leads" or plastic material associated with the encapsulated "chips." Stewart-Warner's position with re-

spect to its lack of need for a license under any patent other than the Derick and Frosch patent and its insistence on a license under that patent, *alone,* is tacit recognition of the value of the Derick and Frosch patent to the profitable manufacture or sale of Stewart-Warner's "housed devices."[6]

The opinion of the Court of Appeals for the Fourth Circuit in *Marvel Specialty Company* v. *Bell Hosiery Mills, Inc.,* 386 F.2d 287 (1967), contains a summary of the decided cases which are most directly in point on the issue of the measure of recovery in patent cases. It is clear that where there is an established royalty rate, that is the best measure of recovery. There is not only such an established royalty rate in the present case, but also an established base to which the royalty rate is applied. Those bases are set forth in Western's standard licenses. The base is the fair market value (sales price) of the "housed devices" embodying the "chips" made by the Derick and Frosch process.[7]

C. *Exclusion of Items From Base*

Stewart-Warner seeks to exclude from the computation all "housed devices" which were manufactured in the Orient, notwithstanding the fact that the "chips" in-

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[6] It should be noted that Stewart-Warner was not in the business of selling "chips." It was in the business of manufacturing and selling electronic devices which utilized the superior properties of the silicon "chips" made in accordance with the Derick and Frosch process.

[7] If the sales price of the "chips" instead of the "housed device" sales price was used as the base in Western's licenses, a higher royalty rate would probably have been set. For example, a royalty rate of 10½ percent might be proper if based on the value of "chips," since "chip" values are only about one-seventh of the average value of "housed devices." Also, it is more convenient to apply a royalty rate to the price of a marketed product as a base than to apply it to the value of a component which is not, itself, a regularly marketed commodity.

cluded therein were made in the United States by the Derick and Frosch process. It is contended by Stewart-Warner that the "chips" made in the United States were sold to fabricators in the Orient who were not affiliates of Stewart-Warner, and the sales were arm's-length transactions. In support of its contention, Stewart-Warner relies upon agreements, invoices, and Customs documents reflecting the transactions with its fabricators. The ultimate question is whether the relationship between Stewart-Warner and its fabricators was that of vendor-vendee or bailor-bailee. Western contends that it was the latter.

Sewart-Warner owned all of the equipment used to encapsulate the "chips" and to make the "housed devices." The equipment was loaned or leased to the fabricators at no charge, and the equipment was to be used exclusively for manufacture of devices for Stewart-Warner. When Stewart-Warner terminated its agreement with one fabricator, it removed its equipment and transferred it to another fabricator.

The prices used on the invoices and Customs documents were not based on a fair market value. They were based on a value set by Stewart-Warner which would result in the lowest duty acceptable to the United States Bureau of Customs.

The terms under which the "wafers" or "chips" were supplied to the fabricators prohibited the fabricators from either reselling the "wafers" or "chips," as such, or using them in the manufacture of "housed devices" other than those shipped back to Stewart-Warner. The fabricators were held accountable for all "chips." including rejects or salvaged "chips."

The fact is that Stewart-Warner not only refused to relinquish control of the "wafers" or "chips," but also supplied them only to fabricators to whom Stewart-Warner supplied the manufacturing equipment. In short, the fabricators merely supplied the site and the labor for manufacture of finished goods. To the extent that

Stewart-Warner virtually set the fabricators up in the business of manufacturing the "housed devices" exclusively for Stewart-Warner, the facts in this case make out an even stronger argument for a bailor-bailee relationship than the dress manufacturing cases cited by the parties.[8] Even if Stewart-Warner's fabricators furnished some of the plastic or "leads" for manufacturing the "housed devices," the doctrine of accession would apply since the principal part of the "housed device" is the "chip." (*See, Hope Shoe Co.* v. *Advance Wood Heel Co.*, 89 N.H. 178, 195 A. 669 (1937)).

It is concluded that Western is entitled to recover on the basis of the value of the "housed devices" which incorporate "chips" made *in the Uinted States* by the Derick and Frosch process, whether the housing or encapsulation was performed in the United States or elsewhere. Of the three alternative bases to which the agreed royalty rate is to be applied that based on the value of all "housed devices" is selected. The agreed sum, based on this conclusion, is $20,940,618, exclusive of interest and costs.

D. *Interest on Amount of Recovery*

The law of this circuit regarding the date from which interest is to be computed on the amount of recovery is clearly set forth in *Marvel Specialty Company* v. *Bell Hosiery Mills, Inc., supra.* Where, as here, the patentee has granted licenses and has established a royalty base and rate, interest runs from the date on which such royalty would have been payable if the defendant were licensed. That date is the date on which the infringements occur.

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[8] *Ginsberg* v. *Kugler,* 174 N.Y.S. 143 (Sup.Ct., App. Term, 1st Dept. 1919); *Brenner* v. *Greenberg & Greenberg,* 183 N.Y.S. 22 (Sup.Ct., App. Term, 1st Dept. 1920) and *Ackerman & Hartnick* v. *Berkowitz,* 123 Misc. 937, 206 N.Y.S. 624 (Sup.Ct., App. Term, 1st Dept. 1924).

Western's standard licenses provide for the payment of simple interest by its licensees on past due royalties at the rate of 7½ percent per annum or the prime rate, plus 1 percent per annum, whichever is greater. Western contends that Stewart-Warner, an infringer, should not fare better than Western's licensees. Using the Western license formula, the interest rate for the years 1970 through 1975 would have been as follows:

1970	8.91%	1973	8.78%
1971	7.5%	1974	11.8%
1972	7.5%	1975	8.85%

Nevertheless, Western suggests that a uniform rate of 8 percent per annum be used for the sake of simplicity.

Stewart-Warner initially contended that interest should not run until the date on which damages are liquidated. Moreover, it argues that §§ 8-223 and 6.1-330.10, Code of Virginia should be followed, the rate prescribed therein being 8 percent per annum from the date of entry of judgment.

Since the parties now agree that 8 percent per annum is a proper rate, it is not necessary to determine whether the rate is subject to the Code of Virginia, the rate established in Western's licenses or the rates established by the Court of Claims in actions against the United States under 28 U.S.C. § 1498(a). The 8 percent rate will be applied.

Applying the foregoing determinations to the sales of "housed devices" sold by Stewart-Warner, the following tabulation shows the basis for the calculation of the amount due Western as of March 31, 1978. Interest after that date will continue at a rate of $68.85 per day to the date of payment of the judgment.

Period	Housed Device Sales	Recovery at Royalty Rate of 1½%		Simple Interest 8%
6/19/69-12/31/69	$ 945,145	$ 14,177.18	(8-3/12 yr.)	$ 9,356.90
1/1/70-12/31/70	2,649,998	39,749.97	(7-3/12 yr.)	23,055.00
1/1/71-12/31/71	1,488,857	22,332.86	(6-3/12 yr.)	11,166.43
1/1/72-12/31/72	2,675,401	40,131.02	(5-3/12 yr.)	16,855.03
1/1/73-12/31/73	7,938,150	119,072.25	(4-3/12 yr.)	40,484.57
1/1/74-8/12/74	5,243,067	78,646.01	(3-3/12 yr.)	20,447.96
TOTALS		$314,109.29		$121,365.89

$$\text{Daily Interest} - \frac{\$314{,}109.29 \times 8\% \text{ int. rate/yr.}}{\frac{\text{days}}{365 \text{ yr.}}} = \$68.85/\text{day}$$

E. *Multiplication of Damages*

The court, in its discretion, may increase the amount of damages assessed, up to three times the amount assessed. 35 U.S.C. § 284. Ordinarily, damages are not multiplied since, to warrant multiplication, there must be a compelling showing that recovery of an amount equivalent to a reasonable royalty will not adequately compensate the patentee for the infringement. A showing of willful and deliberate infringement by a licensee who terminated its license and continued as an infringer is sufficient to warrant an increase in the royalty rate above that which was charged other licensees. *Tights, Inc.* v. *Kayser-Roth Corp.*, ... F. Supp. ....., 196 USPQ 750

(M.D.N.C. 1977). Failure to obtain the opinion of competent patent counsel and continued infringement after notification of infringement is an example of willful and deliberate infringement. *Marvel Specialty Co.* v. *Bell Hosiery Mills, Inc., supra,* at 289. Neither of these cases is controlling on the facts found in the present case.

Stewart-Warner decided to enter the semiconductor field rather late in the game. It founded a subsidiary, Stewart-Warner Microcircuits, shortly prior to January 22, 1964. This was almost seven years after the Derick and Frosch patent had issued. It did not get into production until the middle of 1969. All during that period, negotiations were conducted between Western and Stewart-Warner with a view to taking whatever license Stewart-Warner felt was necessary to enable it to go into production. Stewart-Warner management expressed to its house counsel (who was the chief negotiator for Stewart-Warner) a preference for broad coverage under the Western Electric semiconductor and thin film patents at a royalty rate of approximately 1¼ percent. House counsel felt that a license under all Western patents was not necessary and therefore offered to pay Western a royalty of 1 percent, with Stewart-Warner giving Western a "grant-back license" under its merger patent position. Western refused the offer, taking the position that a maximum of 0.5 percent royalty reduction (to 2 percent) would be made as an allowance for a "grant-back" to Stewart-Warner.

In August 1969, at about the time Stewart-Warner was commencing meaningful production, its house counsel expressed to management his thinking that Western's licensing posture *vis-a-vis* Stewart-Warner was discriminatory and therefore Western was guilty of either misuse of its patents or violation of the antitrust laws. There is no evidence in the record to show that any opinion of outside counsel was obtained by Stewart-Warner management or its house counsel as a basis for the view expressed by its own house counsel. That view was, admittedly, the minority view—perhaps the view of a minority of one. Management indicated that it would

like to conclude the matter on a friendly basis without resorting to litigation, but still be able to operate its Microcircuits Division on a profitable basis. Negotiations continued with that objective in view.

Finally, in March 1970, Stewart-Warner requested a license under the Derick and Frosch patent *only*. It still wanted Western to take a "grant-back" license under Stewart-Warner's patent position, no matter how meager, but wanted the 1½ percent single patent royalty further "shaded" to 1.2 percent since the requested license would be under only the one patent.

House counsel for Stewart-Warner tried to obtain from Western an explicit written statement of its reasons for refusing to license the Derick and Frosch patent alone on a bilateral, "grant-back" license basis. Failing to obtain such a statement, Stewart-Warner's house counsel drew his own conclusions as to the reasons for Western's position. He characterized Western's reasons as "farcical." Thus, as of the middle of 1970, Stewart-Warner and Western reached an impasse in their negotiations.

Recognizing that its continued manufacture of silicon semiconductor devices involved a contingent risk of a holding of infringement, Stewart-Warner set aside a reserve against such contingency.

It cannot be said, on these facts, that the intransigence of the parties in their respective negotiating positions constituted bad faith on the part of either Western or Stewart-Warner. Even if, as Western contends, the antitrust and misuse defenses around which Stewart-Warner rallied have not prevailed in this case, it cannot be said that it was an open-and-shut case all along for either party. Accordingly, there was sufficient evidence of reliance by Stewart-Warner on a supposed defense to justify its continued production without constituting willful and deliberate infringement. Likewise, Western's misgivings concerning the risk of a charge of misuse were not without reason.

Cognizance is also given to the fact that it was not until the trial of this case that either the issue of validity or enforceability of the Derick and Frosch patent was tested in litigation. This is a further reason for not multiplying the amount assessed, as urged by Western.

Finally, one cannot ignore the fact that Western could have brought suit for infringement at the onset thereof. While its delay in bringing this suit may have been attributable, in part, to the hope that Stewart-Warner would ultimately accept a license on mutually agreeable terms, it should have been apparent to Western that litigation was inevitable. Since Western refrained from initiating action until almost the last moment, its damage during the period of delay must not have been significant. Thus, the agreed royalty rate, without multiplication, adequately compensates Western for the infringement.

F. *Attorney Fees*

Attorney fees, like multiple damages, may be awarded to the prevailing party at the discretion of the court. Such an award is provided, however, only in "exceptional" cases. 35 U.S.C. § 285. What constitutes an "exceptional" case is not spelled out in the statute. However, the case law makes it clear that attorney fees should be awarded only where it would be *grossly unjust* to make the prevailing party bear its own attorney fees. *Lundy Electronics & Systems, Inc.* v. *Optical Recognition Systems, Inc.*, 362 F. Supp. 130; *aff'd*, 439 F.2d 1222 (4th Cir. 1973). See also discussion in: *Kaehni, et al.* v. *Diffraction Company, Inc.*, 342 F. Supp. 523 (1972); *aff'd*, 473 F.2d 908 (4th Cir. 1973). In most cases, it is a prevailing defendant who pleads for an award of attorney fees. Here, it is the successful plaintiff who seeks the award.

It does not appear from the record of this case that Western was put to any exceptional expense in pursuing its remedies for infringement of its patent in this court. Neither was it put to any unusual expense in rebutting Stewart-Warner's defenses of invalidity or enforceability.

Western bore only those expenses normally encountered in vigorously-contested patent litigation between two well-established, financially-responsible companies. Furthermore, it is held that there is insufficient evidence to establish that Stewart-Warner acted in bad faith either in defending the charge of infringement or pursuing its affirmative defenses. The facts of record do not support a finding that this is an "exceptional" case. Accordingly, attorney fees are not awarded either party.

III. *Conclusion*

Derick and Frosch patent 2,802,760 is valid and infringed. The patent has not been misused by Western.

Western has not violated the consent decree issued by the United States District Court for the District of New Jersey, requiring Western to license the patent, among others, without discrimination as between licensees.

Western's compromises of claims for accrued royalties have been bona fide and therefore nondiscriminatory.

Western has not used economic coercion against Stewart-Warner in its offer of a unilateral license under the Derick and Frosch patent, alone, at a royalty rate of 1½ percent based on the entire market value of the housed silicon semiconductor devices made by the patented process. Likewise, Western's refusal to take a "grant-back" license under Stewart-Warner's patent position and reduce the single patent royalty rate below 1½ percent in consideration thereof was neither a misuse of the patent nor economic coercion.

It is not a misuse of the Derick and Frosch patent to compute the royalties due on the basis of the entire market value of devices which incorporate semiconductors made by the patented process, rather than the value of the semiconductors at some point prior to their incorporation in useful devices.

There is insufficient evidence in the record of this case to support a defense of unenforceability of the patent against Stewart-Warner.

Judgment is entered in favor of Western in the amount of $435,475.18, plus $68.85 per day, from April 1, 1978 to the date of payment of the judgment as reasonable compensation for the infringement.

Neither party is awarded attorney fees.

Western is awarded allowable costs, to be taxed by the Clerk.

/s/ Francis C. Browne
Francis C. Browne
Trial Judge/Special Master

May 3 1978

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
RICHMOND DIVISION

WESTERN ELECTRIC COMPANY, INCORPORATED,
Plaintiff,

v.

STEWART-WARNER CORP.,
Defendant.

E.D.Va. Dkt. No. 75-0468-R

[MDL Dkt. No. 244]

FINDINGS OF FACT AND
CONCLUSIONS OF LAW

Filed May 8, 1978

1. It is uncontested that Western is the owner of all right and title to the Derick-Frosch patent, including the right to recover for past infringements thereof.

2. The semiconductor manufacturing operations conducted by Stewart-Warner in the manufacture of all of its semiconductor devices during the period September 19, 1969 through August 13, 1974 utilized the processes described by claims 17 and 19 of the Derick-Frosch patent, and infringed those claims.

3. The semiconductor manufacturing operations conducted by Stewart-Warner in the manufacture of all of its semiconductor devices during the period September 19, 1969 through August 13, 1974 are conceded by Stewart-Warner to have utilized the process described by claim 8 of the Derick-Frosch patent, and to have infringed that claim, except:

> Stewart-Warner denies that in its manufacturing operations, its conductivity-type determining impurities "diffuse differentially in regions of the silicon wafer underlying portions where the surface oxide film was removed and in regions of the silicon wafer underlying portions where the surface oxide film was not removed."

4. The semiconductor manufacturing operations conducted by Stewart-Warner in the manufacture of all of its semiconductor devices during the period September 19, 1969 through August 13, 1974 are conceded by Stewart-Warner to have utilized the process described by claim 4 of the Derick-Frosch patent, and to have infringed that claim, except:

> (a) Stewart-Warner denies that in its manufacturing operations, its conductivity-type determining impurities "diffuse differentially in regions of the silicon wafer underlying portions where the surface oxide film was removed and in regions of the silicon wafer underlying portions where the surface oxide film was not removed;" and
>
> (b) Stewart-Warner contends that other operations intervened between the first diffusion referred to in claim 4 and the second diffusion using a vapor of a conductivity-type determining impurity opposite to that used in the first diffusion.

5. The semiconductor manufacturing operations conducted by Stewart-Warner in the manufacture of all of its semiconductor devices during the period September 19, 1969 through August 13, 1974 included oxide masking

processes in which the conductivity type of those regions of the silicon wafers underlying portions where the surface oxide film was removed were made opposite to the conductivity type of regions of the silicon wafer underlying portions where the surface oxide film was not removed, and Stewart-Warner selected its oxide thicknesses with the intention of preventing diffusion through the oxide mask layer. The amount of diffusion, if any, which took place through the oxide layer was not measured by Stewart-Warner but was not significant and was, in all cases, insufficient to change the conductivity-type of the silicon wafer in regions where the oxide film was not removed.

6. The term "diffuse differentially" as used in the Derick-Frosch patent encompasses situations involving complete masking, with no measurable diffusion beneath the oxide layer, and also encompasses situations in which the mask has a moderating effect on the diffusion (Col. 8, lines 54-59, 72-75). The patent describes several examples involving complete masking (Col. 4, lines 22-28; Col. 9, lines 27-31; Col. 10, lines 5-14). Even with complete masking, some vapor impurities penetrate the oxide layer and diffuse into the silicon but they do not affect the electrical characteristics of the resulting device. In light of these disclosures of the patent, the expression "diffuse differentially" as used in the patent is understandable to a person skilled in the art and embraces complete masking in which there is no measurable diffusion beneath the oxide layer.

7. No significant diffusion takes place beneath the oxide mask when Stewart-Warner employs the oxide masking process as described in Finding No. 5. The expression "diffuse differentially" used in claims 8 and 4 of the Derick-Frosch patent, when construed in light of the patent's specification, encompasses situations in which there is no measurable diffusion beneath the oxide layer; hence, the expression "diffuse differentially" is applicable to Stewart-Warner's process.

8. Infringement of the remaining elements of claim 8 is conceded by Stewart-Warner; hence, that claim is infringed.

9. Infringement of the remaining elements of claim 4 is conceded by Stewart-Warner; hence, claim 4 is infringed, notwithstanding the fact that other steps, in addition to those recited in the claim, are included in the processes employed by Stewart-Warner.

10. During the period September 19, 1969 through August 13, 1974, Western had an established unilateral royalty rate of 2½% with respect to semiconductive apparatus licenses. Western also had, during that period, a schedule of single patent reduction factors used to reduce the royalty to licensees who chose to use and pay royalties on less than all of the licensed patents. The single patent royalty reduction factor for the Derick-Frosch patent was 40%, and applying this reduction to the royalty produces an effective single patent royalty rate of 1½% with respect to the Derick-Frosch patent. Therefore, I find that a royalty rate of 1½% will provide not less than a reasonable royalty when applied to the selected base figure as found in Finding of Fact 12, *infra*.

11. The royalty base to be used in calculating an award of damages adequate to compensate Western for Stewart-Warner's infringement of the Derick-Frosch patent in suit during the period September 19, 1969 through August 13, 1974 has been selected from among the following figures:

$20,940,618 — the total sales by Stewart-Warner of finished semiconductor devices during the recovery period.

$4,657,282 — the value contended by Stewart-Warner for chips made by it in this country and transferred by it to offshore assembly facilities for further processing, plus sales by Stewart-Warner of finished semiconductor devices processed completely in this country, during the recovery period.

$3,502,028 — the value contended by Stewart-Warner for chips made by it in this country and transferred by it to offshore assembly facilities for further processing, plus the value contended by Stewart-Warner for chips used in devices processed completely in this country, during the recovery period.

12. The selected base figure for calculating the measure of damages adequate to compensate Western for Stewart-Warner's infringement of the Derick-Frosch patent in suit is the sale price of the semiconductor devices which include the chips made by the infringing processes as such devices are useful in and sold as articles of commerce, not the price used in billing unfinished chips employed in an intermediate stage of manufacture of operable semiconductor devices, as that term is used in licenses granted by Western. Therefore, I find that the applicable base figure is $20,940,618, to which the 1½% rate found in Finding of Fact 10, *supra,* is applied. The amount found, therefore, is $314,109.27, exclusive of interest and costs (See Findings of Fact 23 and 24, *infra.*)

13. The Derick-Frosch invention was first publicly disclosed, by Frosch, at a symposium for scientists and engineers held at Purdue University in 1956. The oxide masking and passivation inventions of Derick and Frosch contributed substantially to what later became known as the "planar" technology, a concept which became extensively employed in the manufacture of integrated circuits, microelectronic components and "solid state" devices of all kinds.

14. The inventions of the Derick-Frosch patent in suit were recognized in the semiconductor industry as "fundamental." There were many discussions in the late 1950's and early 1960's about the work of Derick and Frosch, among people in the semiconductor industry, during which time the authorship or validity of the Derick and Frosch process, as claimed in the patent in suit, was not contested.

15. In February 1966 Professor Holonyak wrote in a *Scientific American* article that the Derick and Frosch oxide masking process was vital to microelectronics.

16. Dr. Moll—now the technical director of the Corporate Integrated Circuits Laboratory of Hewlett-Packard Corporation, a former professor at Stanford University, and a longstanding expert in semiconductor technology—testified that it would be virtually impossible to make integrated circuits without oxide masking.

17. The Derick-Frosch inventions enjoyed enormous commercial success as evidenced by the fact that members of the industry have paid millions of dollars in royalties under licenses widely granted by Western under the Derick-Frosch patent, among others in the Western semiconductor patent portfolio.

18. The Derick-Frosch patent was specifically brought to the attention of Stewart-Warner in 1964. In the early course of license negotiations between the parties, Stewart-Warner's patent attorney indicated an interest in a license only under the Western patents that he believed valid and infringed by Stewart-Warner. Thereafter, Stewart-Warner's patent attorney (and others working under his direction) caused an extensive validity and infringement study to be made of the Derick-Frosch patent in suit. Stewart-Warner's patent attorney found no evidence to lead him to believe that the Derick-Frosch patent was invalid (and therefore not infringed) until he examined laboratory notebooks of others during discovery in this action.

19. Stewart-Warner was dilatory in its conduct of the license negotiations with Western. Stewart-Warner proceeded with its plans to use the processes defined by the infringed claims of the Derick-Frosch patent, and ultimately used those processes without a license from Western. Stewart-Warner's excuse for not taking a license under the Derick-Frosch patent was that it did not want a license under any other Western patent and would only

take a license under that patent alone if it would be granted a royalty reduction for a license back, which license Western declined.

20. Stewart-Warner originally contended that the Derick-Frosch patent was invalid for failure to satisfy virtually all of the statutory conditions for patentability. At the trial on the issue of validity, however, Stewart-Warner abandoned its defense of anticipation under 35 U.S.C. § 102. Its defense was based primarily on a contention of "derivation" (§ 102(f)) or "obviousness" (§ 103). At the trial on all other issues, it has relied principally on the ground of unenforceability as a conseqence of Western's alleged "misuse" of its rights in the Derick-Frosch patent.

21. Although Stewart-Warner pleaded that it did not infringe the Derick-Frosch patent, infringement was conceded.

22. Western, as a part of its patent licensing policy in the semiconductor field, has allowed so-called grant-back reductions in royalties to licensees who have taken licenses under all or less than all of its patents, including the Derick-Frosch patent. Western offered such a grant-back reduction to Stewart-Warner if Stewart-Warner would take a license under a plurality of the patents, including the Derick-Frosch patent. However, Western refused to give Stewart-Warner a grant-back reduction if Stewart-Warner desired a license only under the Derick-Frosch patent.

23. Western offered Stewart-Warner a grant-back reduction of ½% if Stewart-Warner would take a license under Western's entire semiconductor patent portfolio or under four specified semiconductor patents including the Derick-Frosch patent, but refused to give Stewart-Warner any grant-back reduction if it desired a license under the Derick-Frosch patent alone.

24. Western granted licenses to others under which Western obtained immunity from suit with respect to patents of those licensees.

25. Western refused to accept Stewart-Warner's offer of a grant of royalty-free cross licenses to Western under Stewart-Warner's patents, pending applications, and future inventions, as a condition of granting to them a license under the Derick-Frosch patent only. This refusal did not constitute a misuse of the rights of Western under the Derick-Frosch patent or any other of Western's patents in the semiconductor field.

26. Western has not licensed its patents in the semiconductor field to anyone at discriminatory royalty rates. Western's evaluations of the patents, pending patent applications, and research and development potential of its licensees, have not been arbitrary or without evaluation on a case-by-case basis.

27. Western required that, if a license under its patents was accepted by Stewart-Warner, the royalties would be computed on the sale price of finished, packaged semiconductive devices or apparatus, in the manufacture of which semiconductive chips were encapsulated either (a) at Stewart-Warner Microcircuits or (b) by any business entity to which the chips were furnished by Stewart-Warner for that purpose.

28. Western asserted its rights in the Derick-Frosch patent and the other patents in its semiconductor patent portfolio by bringing actions against unlicensed parties for infringement of the Derick-Frosch patent, not only to maintain enforceability of its patents, but also to protect the legitimate interests of those to whom licenses had been granted under the patents in Western's semiconductor patent portfolio.

29. Western granted retroactive licenses under the Derick-Frosch patent as part of the settlement terms in those of the aforementioned infringement actions in which the defendants agreed to take a license under Western's semiconductor patents. The terms under which those actions were settled were not more favorable than those offered to infringer (such as Stewart-Warner) who were unwilling to take such a license.

30. In the aforementioned infringement actions which were settled as to past infringement, the defendants agreed to make the settlement payments based on their sales of finished, packaged semiconductive devices or apparatus, even though the processes covered by the claims of the Derick-Frosch patent were used only in the production of semiconductive chips employed in such devices.

31. Western's failure to sue Stewart-Warner for infringement of the Andrus, Kliemack and/or Pfann patents is irrelevant to any issue in this action.

32. Stewart-Warner would have been granted terms more favorable to it than to Western's other licensees if Western granted a license to Stewart-Warner under the Derick-Frosch patent only, with the same grant-back reduction which Western had allowed to those who took a license under (a) all of the patents in Western's semiconductor patent portfolio or (b) the Derick-Frosch, Andrus, Kliemack and Pfann patents.

33. Stewart-Warner's conduct of license negotiations with Western, while not in bad faith, was one-sided in that Stewart-Warner refused to take a license under the Derick-Frosch patent except on its own terms. In so doing, Stewart-Warner was aware of the fact that it might become necessary to litigate the matter.

34. Prior to the conclusion of the validity and infringement study of Western's Derick-Frosch, Andrus, Kliemack and Pfann patents by Stewart-Warner's patent attorneys, Stewart-Warner's Director of Patents advised both Stewart-Warner's management and Western that, in his opinion, Western was using its patents in a manner which violated the antitrust laws. No opinion was expressed by Stewart-Warner's patent counsel, however, with respect to the issues of infringement or validity of the Derick-Frosch patent up to that time.

35. Western never granted, nor was it requested to grant, to anyone a license under the Derick-Frosch patent alone, nor did Western ever license the use of the Derick-

Frosch patent to any licensee who did not take a license under at least four other Western patents in the semiconductor field.

36. It is not likely that during the term of the Derick-Frosch patent that anyone could manufacture a silicon semiconductor device without infringing one or more other Western patents in addition to the Derick-Frosch patent.

37. On the evidence as a whole, it is found that (a) Stewart-Warner has not willfully or deliberately infringed the Derick-Frosch patent in suit and (b) this is not an exceptional case within the meaning of 35 U.S.C. § 285. Hence, damages will not be multiplied nor are attorneys' fees awarded.

38. Western-Electric provided in its standard license agreements for the payment of royalties on a semi-annual basis. The license agreements also included a provision requiring the payment of interest, in the event that the royalties were not paid when due, for the period during which the royalty payments were withheld. Accordingly, interest is assessed as part of the damages suffered by Western, at a rate of 6% per annum, from the date of Stewart-Warner's infringement to the date of payment of the judgment.

39. Costs, to be taxed by the Clerk, are allowed to plaintiff as the prevailing party.

CONCLUSIONS OF LAW

1. Western is the owner of all right and title to the Derick-Frosch patent, including the right to recover for past infringements thereof (35 U.S.C. §§ 100(d); 281; 284).

2. Stewart-Warner has infringed each of Claims 4, 8, 17, and 19 of the United States Patent 2,802,760 (35 U.S.C. § 271).

3. Western has not misused the Derick-Frosch patent. *Hazeltine Research, Inc.* v. *Zenith Radio Corp.*, 388 F.2d 25, 33-34 (7th Cir. 1967), *aff'd in part, rev'd in part, and remanded*, 395 U.S. 100, 135, 137-39 (1969); *American Securit Co.* v. *Shatterproof Glass Corp.*, 268 F.2d 769, 771, 775-78 (1959); *Mercoid Corp.* v. *Mid-Continent Co.*, 320 U.S. 661, 666-67 (1944); *Compton* v. *Metal Products, Inc.*, 453 F.2d 38, 42 (4th Cir. 1971).

4. Western is not barred by laches from asserting against Stewart-Warner any claim for infringement of the Derick-Frosch patent.

5. Western is entitled to damages adequate to compensate it for Stewart-Warner's infringement of United States Patent 2,802,760 (35 U.S.C. § 284).

6. Western is entitled to damages in the amount of $314,109.27 as adequate compensation for Stewart-Warner's infringement of United States Patent 2,802,760 (35 U.S.C. § 284).

7. Western is also entitled to an award of interest in the amount of $131,925.92 to and including December 31, 1977, and $51.63 per day from January 1, 1978 to the date of payment of the judgment, as part of its compensation for the infringement (35 U.S.C. § 284).

8. This is not an exceptional case within the meaning of 35 U.S.C. § 285; hence, attorneys' fees are not awarded to either party.

Respectfully submitted,

/s/ Francis C. Browne
Francis C. Browne
Special Master/Trial Judge

May 3, 1978

UNITED STATES DISTRICT COURT
Southern District of Florida

Case No. 74-1601-Civ-CA

WESTERN ELECTRIC COMPANY, INC.,
Plaintiff,

vs.

MILGO ELECTRICAL CORPORATION and INTERNATIONAL COMMUNICATIONS CORPORATION,
Defendants and Third-Party Plaintiffs,

vs.

AMERICAN TELEPHONE AND TELEGRAPH COMPANY,
Third-Party Defendant.

ORDER GRANTING IN PART AND DENYING IN PART MOTION FOR SUMMARY JUDGMENT

(Filed Sep 20 1976)

This Cause is before the Court on motion of plaintiff Western Electric Company, Incorporated (hereinafter "Western") for summary judgment against defendants Milgo Electronic Corp. and International Communications Corporation (hereinafter "Milgo").

As grounds for its motion, Western asserts that Milgo has no standing to enforce the consent decree entered in the Government action against Western and has no standing to assert a claim for discriminatory royalties because Milgo has not applied for, and does not want, a license and therefore has not been damaged by the alleged discrimination.

Western strenuously argues that Milgo cannot show either actual or potential damages to itself resulting from Western's allegedly discriminatory licensing practices because Milgo is neither an applicant for a license nor a

licensee of Western's patents. It is academic that injury in fact is a requirement for standing under the antitrust laws.

Plaintiff cites *GAF Corp.* v. *Circle Floor Co., Inc.*, 463 F. 2d 752 (2d Cir. 1972) where the Court held that the facts alleged by plaintiff were not sufficient to state a claim for relief for damage to GAF's business by reason of a restraint of trade; that treble damages are avaliable only to those who have suffered some dimunition of their ability to compete. Thus, this Court must look to the allegations found in the counterclaim against Western to determine whether Milgo has alleged competitive injury. In so doing, the Court must keep in mind the teaching of the Supreme Court *Hospital Building Co.* v. *Trustees of Rex Hospital*, #74-1452 (S. Ct. 5/24/76); and the Fifth Circuit, *Miller* v. *Granados*, 529 F. 2d 393 (5th Cir. 1976), that complaints alleging antitrust violations are to be liberally construed. The inquiry, then, is whether Milgo's competitive business position was harmed by the anticompetitive effects of the alleged restraint of trade. *Perkins* v. *Standard Oil Co.*, 395 U.S. 642 (1969).

Milgo is a competitor of Western in the manufacture of telephone equipment. The market in which they compete is loosely defined as those who purchase and/or lease telephone equipment. Milgo has alleged that because of practices engaged in by Western; i.e., use of discriminatory royalty rates, monopolization and attempted monopolization, and tieing the use of a DAA to all non-Western manufactured equipment, Milgo has suffered in that the class of telephone equipment purchasers/lessees are forced to pay more if they purchase/lease from Milgo and therefore purchase/lease from Western. These allegations, specifically stated in the counterclaim, alleged competitive injury sufficient to confer standing.

Milgo's counterclaims were skillfully drafted in that there are very few references to violation of the consent decree per se. Examination of the complained of sections shows that only paragraphs A-29(d) and (e) allege viola-

tions of the consent decree. Those paragraphs should be stricken. The remaining paragraphs, although alleging acts that may fall within the prohibitions of the consent decree, are couched in antitrust and unfair competition language and suffer no infirmity such that would cause this Court to strike them.

Western further attacks Milgo's assertion of paragraphs which constitute a challenge to tariffs filed with the FCC. In this Court's March 17, 1976 Order, there was a ruling that the issue of whether or not the tariffs which allowed plaintiff to require the use of a data access arrangement when non-Western manufactured equipment was used was a matter peculiarly suited for reference to the Federal Communications Commission (hereinafter "FCC"). At that point the Court did not have the benefit of the FCC Order entered in Docket #19528 before it.

The Court has now read the First Report and Order in Docket #19528 (released November 7, 1975). It appears that the Commission therein established a registration program for customer-provided equipment. Allegations of registration in accordance with that Order are absent from Milgo's filings. Thus, at this time, it appears to the Court that those paragraphs of Milgo's counterclaim which allege unfair competition and antitrust claims based upon the tariff are not properly before this Court.

The issue of claims based upon the alleged violations of the consent decree present a different problem. It is clear that this Court may entertain the alleged consent decree violations as a defense to the infringement action. *American Securit Company* v. *Shatterproof Glass Corporation* (D.C. Del. 1957, 1958), 154 F. Supp. 890 and 166 F. Supp. 813, affirmed, 268 F. 2d 769 (3d Cir. 1959), cert. den. 361 U.S. 902, reh. den., 361 U.S. 973; *American Securit Company* v. *Hamilton Glass Company,* 258 F. 2d 889 7th Cir. 1954). However, the violations, if any, of the consent decree do not give rise to an independent cause of action under the antitrust laws. *Paul M. Harrod Co.* v. *A. B. Dick Co.,* 194 F. Supp. 502 (N.D. Ohio 1961).

The cases cited to the Court by Western show that the use of consent decree violations by defendants is limited to that of a shield and may not be extended as a sword.

Western also claims that the challenged practices are proper and refers to Paragraph X(C) of the consent decree to show that the practices are specifically authorized. It does not appear to the Court that there are no material facts in issue as to whether or not the challenged practices are proper and thus summary judgment would be improper at this time. Examination of the allegations shows that Milgo's claims are based on its assertion that Western and AT&T are related and therefore, while there is no requirement that the Bell Operating Companies pay royalties to Western, when the operating companies lease modems to subscribers without charging a royalty; it is the same as Western leasing the modems without charging a royalty. The underlying facts are heavily contested and preclude entry of summary judgment. Western further argues that research and development costs are passed on to operating company subscribers for whom a royalty is not separately stated and that these licensees suffer no economic disadvantage because, by buying the technology from Western, they have avoided incurring the expenses which the royalty is intended to recoup. Based on that statement, Western claims that Milgo's fundamental proposition is fallacious. However, it does not appear to be so clear cut to this Court. Milgo's argument in opposition is that if the research and development costs are billed to all subscribers, and if those subscribers who use non-Western manufactured modems pay equally with those who use Western manufactured modems and also pay the additional royalty, then the cost to non-Western manufactured modem users is higher and as a result Western's practices cause modem users to purchase from Western rather than Milgo.

In view of the foregoing, it is clear that most of the essential facts are in dispute and that granting of summary judgment would be improper.

It is Ordered and Adjudged that Western's motion for summary judgment is denied, except as to paragraphs A-29(d) and (e) of the counterclaim and those paragraphs alleging unfair competition and antitrust claims based upon tariff #163. Accordingly, those paragraphs are hereby ordered stricken.

Entered at Miami, Florida, this 18th day of September, 1976.

/s/ C. Clyde Atkins

United States District Judge

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